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SCIENCE & HUMANITY

NO TOLL ROUTES TO THE STARS!

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By John Lear

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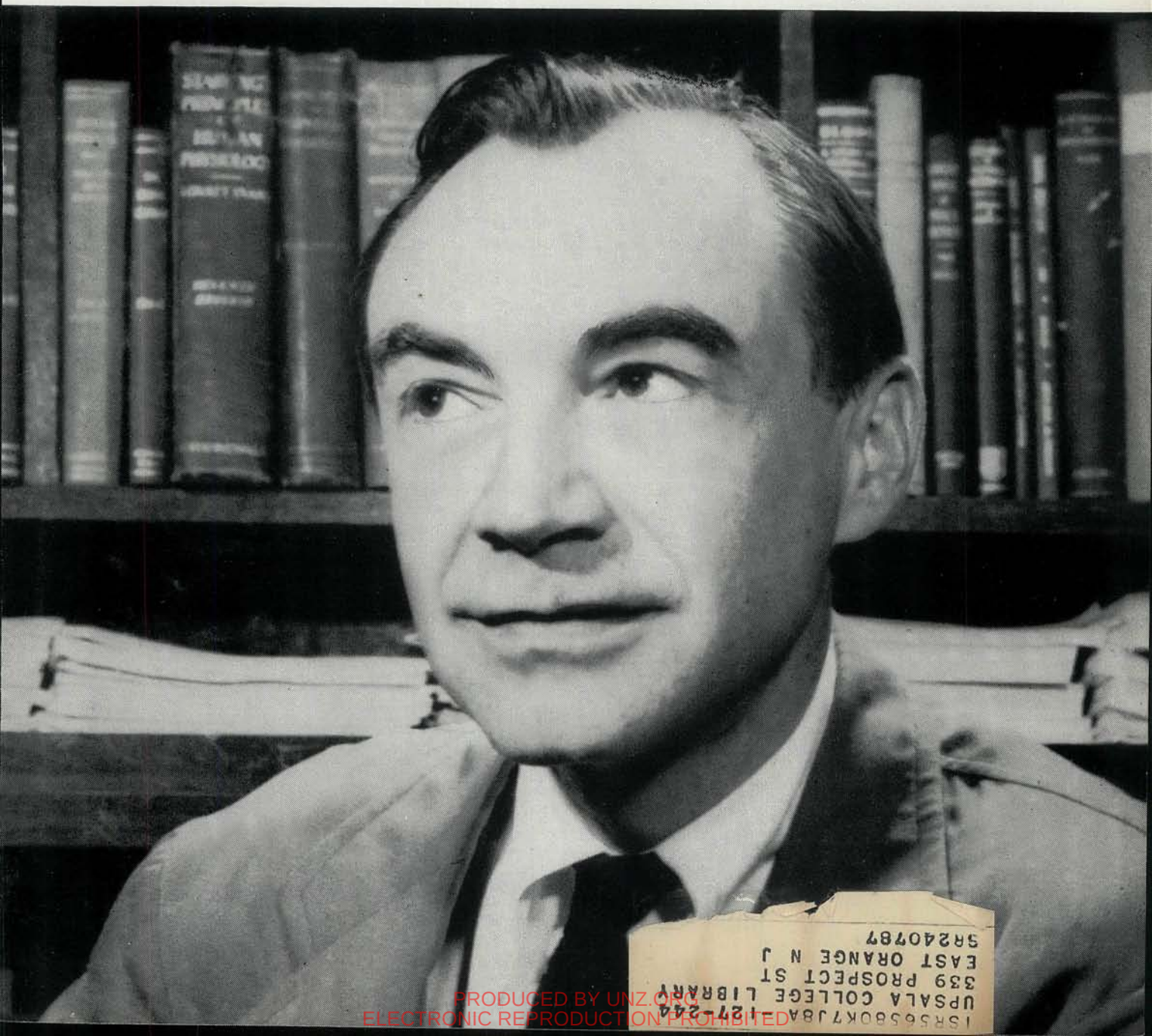

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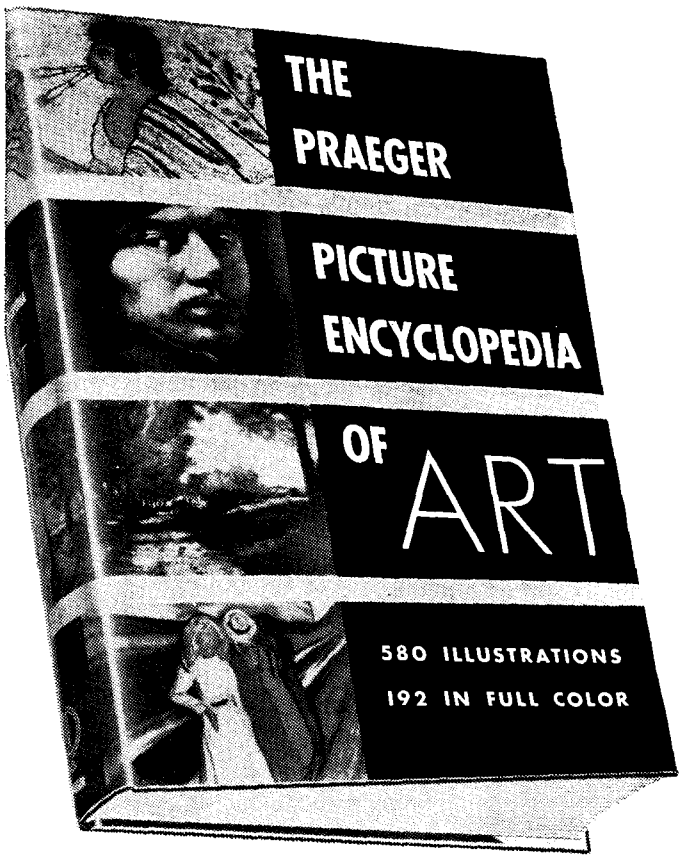

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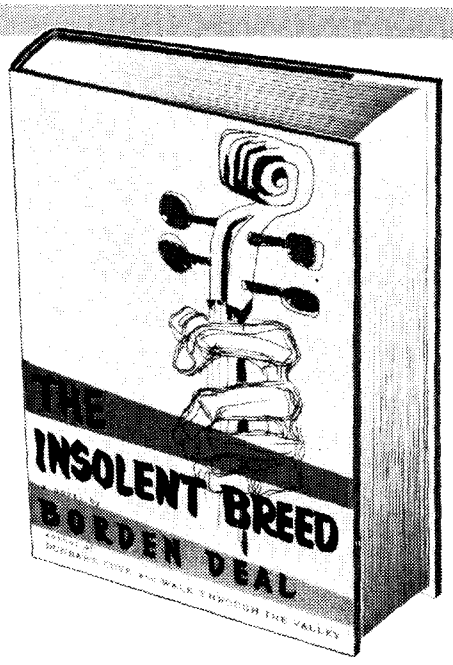

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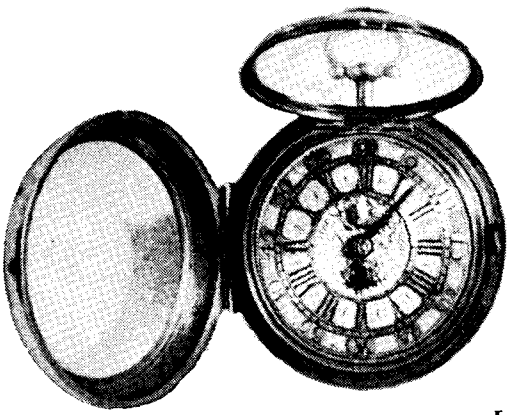
Last Minute Bulletins on the Irish Geophysical Year



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[VOL. II Nº VII]

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FIRST OF THE MONTH

By Cleveland Amory

IT WAS THE MONTH of K, a name that probably appeared in the papers more often than any other in the world—and yet we are willing to wager that not one of ten readers can spell it right the first time without reference to it in print. Somehow we hope this is not symbolic of the difficulties of communication between the two countries.

• • •

One difficulty, on the American side, was the work of the communicators themselves, particularly those on the distaff side. We were a little perturbed by the first headline we saw of The Visit (in *The New York Journal-American*): "K WAVES AT DOROTHY KILGALLEN." We were even more perturbed when we read Miss K's report of the clothes of Mrs. K. "It would be difficult," she wrote, "to find clothes comparable to hers in the waiting room of a New York employment agency for domestic help . . . applicants for jobs as laundresses, chamber maids and cooks usually are far more à la mode than Russia's First Lady. . . . Her blue and blue-gray suit could be most charitably described as dismal. It was rumpsprung, wrinkled, at least four inches longer at the hem than is currently correct, and it had no point of view, right or wrong."

• • •

Well, we didn't think such an awful lot of Miss Kilgallen's point of view either, at this point, but hers was as nothing compared to another distaff reporter by the name of Miss Ruth Montgomery. On September 15th, Miss M. wrote: "Mrs. Nina Khrushchev, sporting badly swollen ankles . . . waddled down the red carpet in the Land of the Free . . . the gray-blue suit stretched shapelessly over her bulging tummy and hips, and hung longer in front than in the rear. The flesh of her feet puffed out above her open-work black shoes. . . ." And, if that wasn't enough, the next day, in a September 16 dispatch, Miss Montgomery repeated all her previous pronouncements, including the "swollen ankles," "the bulging," and the "open-work black shoes," etc., and this time added something about "Nina's puffy feet."

• • •

Somehow we think that the next time President Eisenhower asks the public to be polite, he might include a short talk to that section of the public which might be called, politely, the ladies of the press. Evidently, they felt that the whole visit wasn't fashionable enough, but it is also just possible that the Russians feel that clothes, cosmetics, etc.—and other billion-dollar businesses—may not be quite as important as getting to the moon and being first in space and a few other achievements.

• • •

On the International (Set) Front, there was a lot of fashionable news too—particularly that which concerned the new Onassis-Callas set-up, and the fact that the husband of Maria, Giovanni Battista Meneghini, remembered how his wife looked when he first met her. "She was," he said, "a fat, clumsily dressed woman." So we guess clothes do make something, at any rate. Also out of Venice came news that Miss Elsa Maxwell, who was notably silent, for once, on the subject of her intimate friends' romance (she apparently liked both Callas *and* Onassis), nonetheless managed, in the midst of the crisis, to come up with a new idea for a party—for everyone to come as the person they most disliked in the world. Apparently it was quite a party too—very confusing, though, because so many people came as each other.

• • •

Meanwhile, the man who six months ago predicted that "fashions would not change radically until man contacted the moon," died, by an ironic coincidence, the day before the Russians got there. One of the all-time greats of the fashion business and long the arbiter of Hollywood fashionables, he was named Adrian (his first name, Gilbert, being something of a casualty of his fame and fortune). A tall, thin, intense-looking person, he was, his mustache to the contrary, usually described as "looking the way a designer should look," and was credited with perhaps more new fashions than any other American couturier—among them the pillbox hat (originated for Greta Garbo) and the snood (for Hedy Lamarr).

Born in Naugatuck, Connecticut, he began to draw at three ("rather weird imaginative things that terrified my mother"), and at five caused his parents equal concern by his desire to illustrate Edgar Allen Poe. Shipped off to art school in New York, he used to

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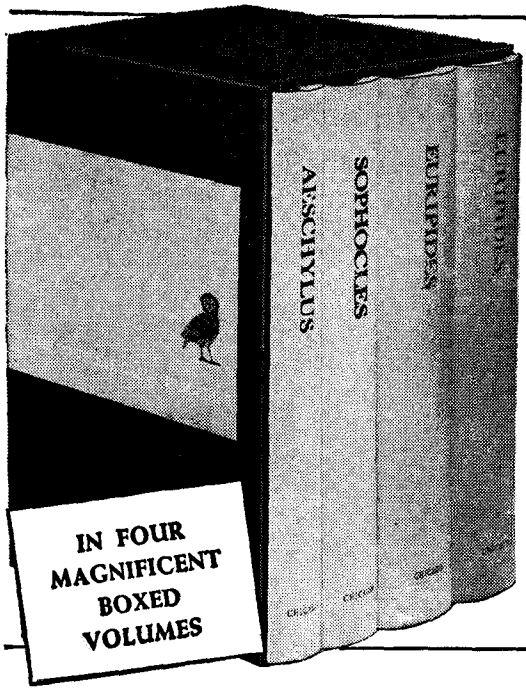

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—DUDLEY FITTS, *New York Times*

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slip away and spend his time, prophetically enough, drawing lions in the zoo. Afterwards came Hollywood, a happy marriage to Miss Janet Gaynor in 1939, and finally a house in the then utterly remote town of Anapolis in Brazil (which, a few years after Adrian picked it out, was picked out by the Brazilian government for its future capital, Brasilia). Of Greta Garbo, the remarkably outspoken designer once said, "It is difficult to have an evening gown fit properly with the right lines when the *person* wears low heels." Of American fashions in general, he remarked, "The average woman should limit herself to the costumes worn by the heroines of light comedies laid in moderate-sized towns."

• • •

Out of one moderate-sized town, Westport, Connecticut, came news that a private group of Westport citizens made an independent study of the elementary- and high-school curriculum and came up with the finding that students were getting too much "pablum" and not enough food for serious thought in their history courses. As an old hand at criticism of the manner in which schools teach history, we applaud the report.

We have always had the feeling that one year on the Indians in maybe the first grade, a year on English history in the second grade, a year on the Eskimos in the third grade, a year on the Egyptians in the fourth grade, a year on the Vikings in the fifth grade, a year on Marco Polo in the sixth grade, a year on the Greeks and Romans in the seventh and eight grades, then two or three years with maybe no history at all, and finally a whole year on a rather jingoistic approach to American history (what the Westporters called "in the approved DAR manner") was perhaps not the best way to teach history. We have also long had a theory, on the other hand, that in the first place history should be taught every year (history is, after all, everything and should include the historical approach to science and literature and just about everything else), that in the second place each year should include *all* history, that in the third place what we would call the pyramidal approach should be used (that in the early grades a very little would be learned about each individual problem whether Eskimos, Vikings, or Napoleon, but in later years this would be constantly expanded until the twelfth-grade student, who had the benefit of the constant repetition behind him, would then be able to expand laterally and critically on each problem). Anyway, it's just an idea.

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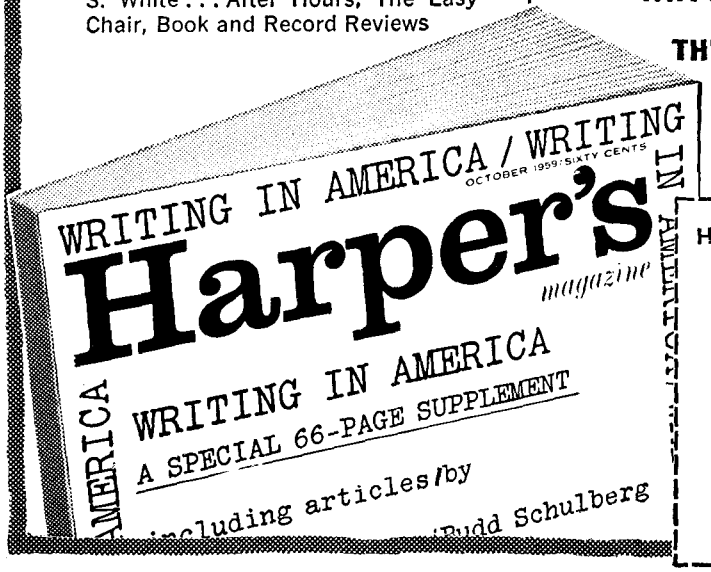
Anonymous



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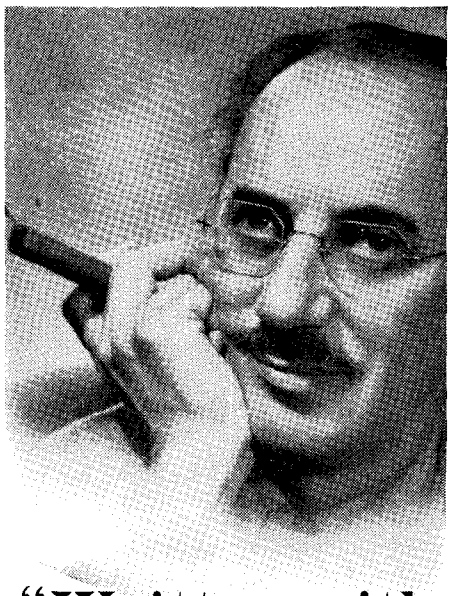

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TRADE Winds

IMPORTANT THINGS to Keep in Mind During Times of Catacylsmic World Events and Individual Stress and Strain, No. 16, Bank Robbing Sub-division:

Last year bank robbers in the United States took $1,300,000 in hold-ups. During the same period of time, however, the employees of banks walked out with $9,500,000.

IN THE LATEST of more than sixty volumes he has written or compiled Louis Untermeyer covers "the story of one thousand years of English and American poetry." The book is called "Lives of the Poets' (Simon & Schuster), a title which he swiped from Sam Johnson, who put together something like it in the eighteenth century. I say "something like it" because Johnson's "Lives" covered a century and a half and mentioned fifty-two poets. Untermeyer takes on 133 of them.

There has been some difference of opinion, too, concerning which poets to include. Of Johnson's original fifty-two, only seven are on the Untermeyer list. According to him, this proves simply that there are changes in taste. To show how extreme it has been, he showed me a list of twenty poets whom Johnson thought were important enough to put in his book, and today no one has ever heard of them. Untermeyer says that three of them would make a good double-play combo, and that's about all: Yalden, Tickell, and Spratt.

"There are only seven or eight of Johnson's poets who have outlasted the fashions of that day," Untermeyer said. "Nevertheless, there is some dispute as to the importance of these. Matthew Arnold made a selection that he entitled 'Johnson's Six Chief Lives,' including Milton, Dryden, Swift, Addison (scarcely a poet), Pope, and Gray. Arnold insisted that Gray was the most important of these.

"But Macaulay, in his 'Life of Johnson,' prepared for the Encyclopaedia Britannica, wrote that 'the very worst life is, beyond all doubt, that of Gray, while the best is that of Cowley.' And Arnold didn't even mention Cowley!"

Sam Johnson had his prejudices, too. Of John Donne, one of Untermeyer's favorites, he said, "It is only by counting the syllables that we recognize his work as verse."

It sounds familiar enough today. I think Louis Untermeyer told me all this so as to head off some complaints from folks who are going to want to know why he chose the poets he did.

I WONDER WHEN Cornelia Otis Skinner had the time to write a book called "The Ape in Me" (Houghton Mifflin), which has just been published. She is co-starring in the Broadway play that she co-authored, "The Pleasure of His Com-

pany," and she can otherwise be found at a desk in her office in New York or at her retreat on Long Island, typing something. Furthermore, she has made up her mind to learn the Russian language, and is taking lessons.

AT THE MEETING of the Society of Magazine Writers in New York two weeks ago, Allen Drury said that the Book-of-the-Month Club had told him it would accept his "Advise and Consent" if he would cut X number of pages from the long book. It was presented on an either-or basis. Drury refused, and BOMC made the selection anyway. TRADE WINDS is reporting this incident, so that if any of you receive a similar ultimatum from the Book-of-the-Month Club, you may safely ignore it.

The Society of Magazine Writers sponsors a course in "Successful Magazine Writing," which is being given at New York University and which makes it a simple matter to write an article and sell it. One of the lecturers, for instance, is Eleanor Harris, who is currently writing a story about Nelson Rockefeller in which she reveals that while she was interviewing him on his private plane he offered her some lunch. It came in a brown paper bag and consisted of sandwiches and pickles from a delicatessen. Last summer, when Miss Harris was working on a story about Earl Long, that Governor gave her a watermelon and a bag of peaches. She had a terrible time carrying these items around and finally left them in a taxi in New Orleans. That seems to be the trend in Successful Magazine Writing: people feed you.

THAT REMINDS ME of a story Fannie Kilbourne told me. She says that the famous market researcher, Dr. Ernest Dichter, wanted to find out what kind of packaging appealed to young people. A member of his staff gave some spending money to ten boys and turned them

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loose in a supermarket with instructions to come out with whatever looked best to them.

Each one of them came out with a big watermelon.

I'M AFRAID BEN LUCIEN BURMAN has another hit on his hands. In "The Street of the Laughing Camel" (McGraw-Hill), he takes a young Texan, Yance Cullum, and starts him off running a laundry for the Arabs in North Africa. The laundry is no more vital to African life than is the Ferris wheel he subsequently operates, nor the general store in the heart of the jungle. But it's pretty funny.

Burman says he began thinking about this plot when he lived in an oasis in the Algerian desert about thirty years ago. While he was there he wrote his first novel, which was about the Mississippi River. Thirty years later, while living on the Mississippi on a houseboat, he wrote this book about Algeria.

STORIES I DON'T BELIEVE HAPPENED: the one that appears in a national magazine about the time John Eisenhower was serving on the staff of his father, General Dwight D. Eisenhower, during the war. Ike sent young John to the front with a message. In the excitement he delivered the message this way to the commander of the troops in the line:

"Father says to watch your right flank."

The colonel, who didn't recognize John, turned to him with a smirk, "And what does your mummy say?"

AFTER I HAD WRITTEN a little while ago about the drunk who cried in the barroom, "I hate everybody regardless of race, religion, creed, or place of national origin," Thomas Brown informed me that this has appeared as part of the midsemester exam in English 4PP, a nonfictional prose course at Queens College, New York.

"Write an essay," the examiner requested, "explaining in Bergsonian terms the reason for laughter at this display of wit. Then evaluate (adding Meredith) both the level of intelligence and the social context on which the 'joke' is operative."

There were four "displays of wit" and Tom Brown and other students had a choice. The others were:

1. He: I like taking experienced girls home.

She: But I'm not experienced.

He: You're not home yet.

2. The difference between Russian tragedy and Russian comedy is that in Russian tragedy everybody dies and in Russian comedy everybody dies—but they die happy.—Danny Kaye.

3. The Queens College student who receives an A or B says, "I got an A (or

On Campus with Max Shulman

(By the Author of "Rally Round the Flag, Boys!" and, "Barefoot Boy with Cheek.")

THE TRUE AND TYPICAL CASE OF CHATSWORTH OSCEOLA

You all know, of course, that every engineering senior is receiving fabulous offers from dozens of corporations, but do you know just how fabulous these offers are? Do you have any idea how widely the corporations are competing? Let me cite for you the true and typical case of Chatsworth Osceola, a true and typical senior.

Chatsworth, walking across the M.I.T. campus one day last week, was hailed by a man sitting in a yellow convertible studded with precious gem stones. "Hello," said the man, "I am Norwalk T. Sigafoos of the Sigafoos Bearing and Bushing Company. Do you like this car?"

"Yeah, hey," said Chatsworth.

"It's yours," said Sigafoos.

"Thanks, hey," said Chatsworth.

"Do you like Philip Morris?" said Sigafoos.

"Of corris," said Chatsworth.

"Here is a pack," said Sigafoos. "And a new pack will be delivered to you at twelve-minute intervals every day as long as you shall live."

"Thanks, hey," said Chatsworth.

"Does your wife like Philip Morris?" said Sigafoos.

"She would," said Chatsworth, "but I'm not married."

"Do you want to be?" said Sigafoos.

"What American boy doesn't?" said Chatsworth.

Sigafoos pressed a button on the dashboard of his convertible and the trunk opened up and out came a nubile maiden with golden hair, flawless features, a perfect disposition, and the appendix already removed. "This is Laurel Geduldig," said Sigafoos. "Would you like to marry her?"

"Is her appendix out?" said Chatsworth.

"Yes," said Sigafoos.

"Okay, hey," said Chatsworth.

"Congratulations," said Sigafoos. "And for the happy bride, a pack of Philip Morris every twelve minutes for the rest of her life."

"Thanks, hey," said Laurel.

"Now then," said Sigafoos to Chatsworth, "let's get down to business. My company will start you at $45,000 a year. You will retire at full salary upon reaching the age of 26. When you start work, we will give you a three-story house made of bullion, complete with a French Provincial swimming pool. We will provide sitter service for all your children until they are safely through puberty. We will keep your teeth in good repair, and also the teeth of your wife and children unto the third generation. We will send your dentist a pack of Philip Morris every twelve minutes as long as he shall live . . . Now, son, I want you to think carefully about this offer. Meanwhile, here is ten thousand dollars in small, unmarked bills, which places you under no obligation whatsoever."

"It certainly seems like a fair offer," said Chatsworth. "But there is something you should know. I am not an engineer. In fact, I don't go to M.I.T. at all. I am a poetry major at Harvard. I just came over here on a bird walk."

"Oh," said Sigafoos.

"I guess I don't get to keep the money and the convertible and Laurel now, do I?" said Chatsworth.

"Of course you do," said Sigafoos. "And if you'd like the job, my offer still stands."

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• • •

Speaking of engineers, the Philip Morris company makes a filter cigarette that's engineered to please the most discerning of filter smokers—Marlboro, the cigarette with better "makin's." More flavor plus more filter equals more cigarette!

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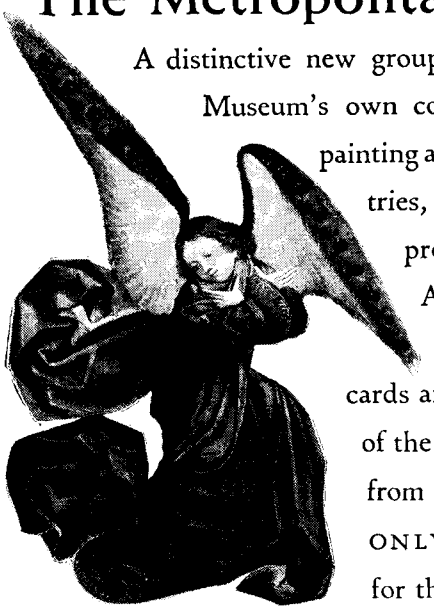

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Please send me the Museum's 1959 Christmas card catalogue, 25 cents enclosed. (6)
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B)." When his grade is C or D, he says, "He gave me a C (or D)."

Tom Brown tells me: "Employing Bergsonian catchwords like something mechanical encrusted upon the living and 'social signification,' and particularly 'corruption of an established phrase,' I managed to muster 28 per cent of the 30 per cent value of the question. And to be different (see No. 3 above), Professor Silverstein gave me an A for the course."

Line to a Wild Science Writer

By Ira M. Freeman

I give you a reporter bright,
Without whom the press could make do.
By him each step, however slight,
Is hailed as a major breakthrough.

NOW THAT OKLAHOMA has voted itself wet, the Union is left with but one dry state: Mississippi. It's been that way since 1908, operating under a marvelous system where the State collects taxes on the forbidden liquor. This is accomplished through a strange black-market statute, which provides for a tax of 10 per cent on "any personal property the sale of which is prohibited by law."

There is no Federal tax on bootleg liquor, of course. The collection of taxes on personal property prohibited by law is such a big job that there is a tax collector whose salary is $40,000 a year. (The Governor makes $15,000.) The situation is very favorable for hijackers, who cannot get into trouble for stealing what's not supposed to be there in the first place.

In spite of all this, booze is cheaper in Mississippi than anyplace, and any state that went wet under such circumstances should have its head examined.

IDDZIES AND ODDZIES: Kay Boyle has been quite ill this hot summer, and I think she would like to hear from her friends, who may address her at Rowayton, Conn.

► Patient: I'm having trouble with my memory.

Doctor: How long has this been going on?

Patient: How long has what been going on?

► Louis Untermeyer told me that he built on his farm the smallest body of water in the United States; it is named Lake Inferior.

► The people at Science Research Associates wired from Chicago to a New York publishing house asking if they could get permission to adapt a book of Plato's philosophy for the reading laboratory. They quickly received their

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reply: "PLATO AVAILABLE FOR ADOPTION."

► From now on I'm going to spell them like this: teleprompter (definitely not TelePrompTer), E. E. Cummings, and Hyman Kaplan. I refuse to use asterisks, umlauts, or cedillas in peoples' names.

► Lloyd's of London just reported a steep drop in profits over a three-year period. Among the causes were heavy and widespread claims, and it's all our fault "People in America," said the *Financial Times*, "have taken increasingly to suing their doctors, their nursing homes, and even their lawyers for malpractice."

► The Russians have gotten to the moon ahead of *Life* Magazine.

► I hope Khrushchev got a good look at our crabgrass while he was over here.

► Ralph Bloomfield says that Ravel was madly in love with a chick from the Left Bank who wore a hearing aid, and that's why he wrote "Deafness and Chloe."

► Fate worse than death: the *Chicago Tribune* correspondent in Havana, Jules Dubois, wrote some articles which the Cubans thought were offensive to the revolution. He is paying the extreme penalty: he has been blackballed by the Cuban Federation of Gastronomical Workers. This means he is boycotted by all waiters, bartenders, bellboys, and the like. He can go into any hotel, restaurant or bar in Cuba and he'll wait till he's blue in the face. That's right—no service. Well, if a fellow's going to be ignored to death, Havana's a lovely place for it.

—JEROME BEATTY, JR.

SOLUTION OF LAST WEEK'S KINGSLEY DOUBLE-CROSTIC (No. 1331)

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All of them alive:
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Noah
Dared hope to survive.
And among that billion* minus one
Might have chanced to be
The next Shakespeare, Newton, a new
Donne—
But the One was Me.

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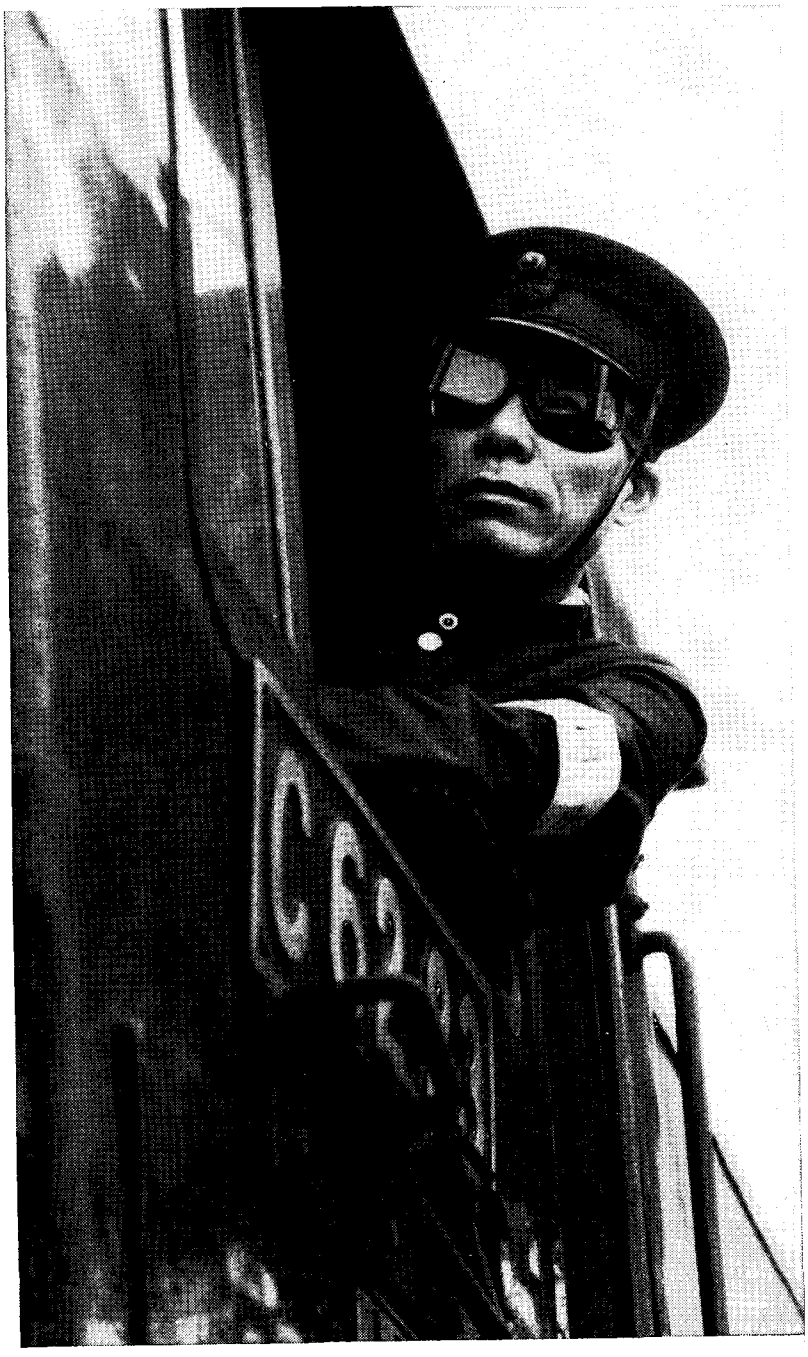
伸びゆく鉄道

(Meaning: Progress on Japan's railroads!)



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* * *

The railroads of the United States ask no special favors. All they ask is equality of treatment — and the opportunity to compete *on an equal basis* — to the benefit of the public.

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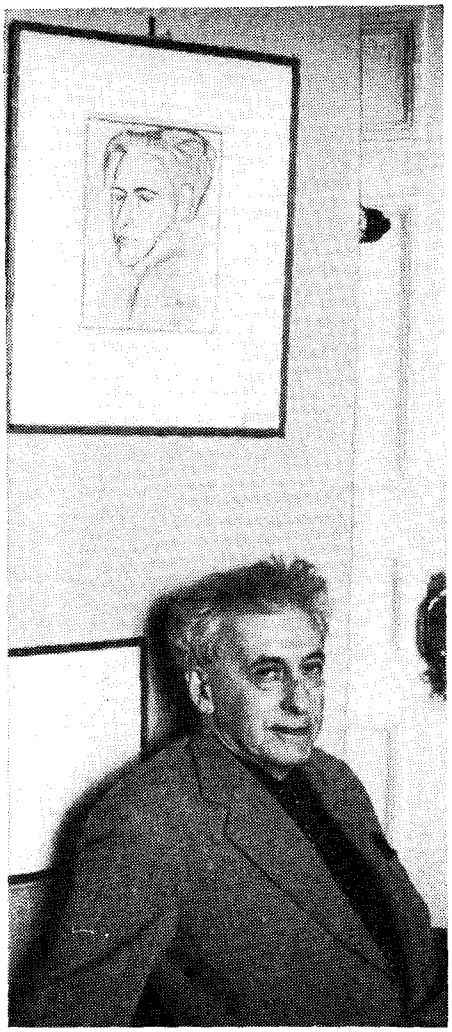
Saturday Review
OCTOBER 3, 1959

READERS AND WRITERS IN RUSSIA

A Conversation with Ilya Ehrenburg in Moscow



Ilya Ehrenburg in his Moscow apartment (sketch of I. E. by Picasso at top).

By NORMAN COUSINS

ILYA EHRENBURG sat in the study of his Moscow apartment and chatted about books, the problems of writers, Picasso, Pasternak, and American-Soviet relations. He spoke in French much of the time, employing fully the melody and subtlety of a language he had obviously come to love.

"You ask about our outstanding writers," he said. "I don't think we really have outstanding writers. Yes, we do have a few who do enjoy some recognition. But we do not have a group or a school of writers who can compare, say, with the group produced in America in recent years—men like Hemingway, Steinbeck, Faulkner, Dreiser, Sinclair Lewis, Upton Sinclair, and so forth.

"Since the Twenties, America has been most fortunate in being able to develop writers with genuine talent who have something to say, who have the literary skill to say it, who use the words that create responses in people. During this period, your literature has been the best in the world—at least from the Twenties to the Forties. Contemporary Soviet literature is far from enjoying any such stature.

"Why should this be so?" he continued. "I have thought much about this question. When I was in the United States some years ago, I tried to find out why it was that the American writer should exhibit a talent that is so much more mature. I think I found the answer. I discovered that the really fine American writer did not begin to write until he had accumulated genuine experience. A man like Hemingway wrote not only out of his imagination but out of the richness of living. John Steinbeck must have done at least a dozen things before he started to write. Anyway, the important thing is that they lived and observed and then wrote. Here, many of our writers write first, live afterwards. Too many of them are hardly dry behind the ears before they burst forth with their ideas on the great human questions that have eluded some of the world's most mature intelligences."

He lit up a cigarette, leaned back, folded his hands under his chin.

"There is something else that might be said here," he resumed. "Your writers know your country and its people, but your people do not know their writers. Here the reverse is true. I discovered in America that the man in the street has seldom ever heard of your really outstanding writers. In fact, in Oxford, Mississippi, I found many people who had absolutely no knowledge of the writing of their fellow citizen, William Faulkner. Elsewhere, I found people who knew nothing about John Steinbeck. In some of your other cities I found people who knew of Hemingway only in terms of the moving pictures that had been made from his books. Everyone knows our writers here—but how much do our writers know about the people?

"Your writers deserve more from the American people than they receive. Here it's just the other way around. Writers are very highly regarded in the Soviet. It has been this way for a long time. I remember, years before the Revolution, when I was a boy, how

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Tolstoi was venerated by the people. My father was an expert on beer-making. The brewery where he worked was next to Tolstoi's house. All the workers at the brewery appreciated the greatness of Tolstoi. They accorded him every recognition. But they couldn't read his books; they were illiterate. This was generally true. Yet they knew about the eminence of Russian writers.

"Then came our revolution. One of the greatest changes produced by the revolution was that it very rapidly conquered illiteracy. Many millions of people began to read serious books for the first time. But I am afraid we achieved width at the expense of depth. For a long time, readers were not as discriminating as they ought to have been. But in more recent years, our readers have grown in sophistication and taste. Our writers, however, have not kept up with them. The result is that many of our readers are far ahead of our writers. They deserve better than they get."

He smiled and his eyes lit up as a flash of remembrance crossed his mind.

"I recall a remark made by a fairly well-known Soviet author at the First Writers' Congress in 1934. He said he didn't feel like writing for the people who then read books. They weren't really capable of understanding what he was trying to say. Five years later, I attended a general literary conference at one of the writers' clubs in Moscow. A number of laymen sat in at the meeting. One of them began to discuss with me the work of the writer whose remark I just quoted. 'I have lost interest in this writer's work,' the layman said. 'It is much too crude and elementary.'

"Now, I am not saying that the situation in the entire country changed within the short space of five years. But there has certainly been a change since the early years following the Revolution. People now are capable of digesting literary works of stature, substance, subtlety, ideas of delicate shading, moods that are finely defined. But we are not producing this kind of literature. That is why I say that our writers are not up to our people. What an ideal situation it would be if we could put together the kind of writing you have in America with the kind of audience we have here in the Soviet Union."

I observed that my host had just given me the best explanation I had heard anywhere for the popularity in Russia of American writers—especially Hemingway, Steinbeck, Dreiser, Saroyan, Sinclair Lewis.

"You know," he said, "the widening of our culture gives me some hope that we may be able to do much better. Consider the poet Martinov. A very fine poet, a serious poet. For a long time his work went unpublished because the people in editorial authority considered his work mad. On the occasion of his fiftieth birthday, his intimate friends planned a celebration. Some of the people in the Writers' Union didn't respond too favorably, but the celebration was held. I was the only one of my generation who came. In any event, two months later, a book of his poetry was accepted for publication. The ban was broken. Martinov had been vindicated. He had held his ground despite all the old charges that he was obscure and detached. And gradually his audience grew up to him. As I say, I have some hope."

As Ehrenburg spoke about the difficulty of getting acceptance for new ideas or new accents, I surveyed the ample representation of modern art in his apartment. I had heard somewhere that he was probably the leading private art collector of modern painting in the Soviet Union. Also, that there were few private individuals anywhere in Europe who had more examples of Picasso's work on their walls.

"Do you find the same resistance to painters like Picasso that once existed with respect to writers like Martinov?" I asked.

Ilya Ehrenburg allowed his gaze to range briefly over the Picasso paintings and sketches on his walls.

"Wonderful artist, Picasso," he said affectionately. "Wonderful man. I had felt that his work was not sufficiently understood or appreciated here. I was fortunate not long ago in being able to arrange a major exhibition for him in one of Moscow's largest galleries. How did the Russian critics react to his abstractions and his artistic conceptions? The showing was a great success, a very great success. It was held over. Almost 600,000 people came out to see it. Then we sent the exhibition up to Leningrad, where it was seen by 500,000 people. It was all very encouraging when one considers that some people predicted that the Soviet people would never respond to the kind of art that Picasso represents."

I told Mr. Ehrenburg I was especially interested in what he just said in view of the impression I had that the Russian Revolution was confined to the political and social. It seemed to be a compartmentalized revolution, judging by the art and the architecture that was in evidence. The new buildings were largely traditional in design; they were squat, massive, ornamental. One could recognize the need to build as quickly as possible, yet one wondered why there should be so much conservatism. Glass, open area, and bold straight lines, which have revolutionized architecture in many parts of the world, appeared to be almost totally absent. Did Mr. Ehrenburg consider it a paradox that a nation should be so revolutionary in one direction and so conservative in another?

Again the cigarette, slowly and deliberately lit and smoked.

"Many things come to mind when you ask that question," he said. "First we will talk about the general historical situation, then painting, then architecture.

"About the general situation: You speak of a compartmentalized revolution. It is perhaps more difficult to change a cultural pattern than a political one. To change a political regime doesn't require too much time. Some countries have done it in a matter of weeks or even minutes. To change an economic system, it takes perhaps ten years or more. But to change the human consciousness and to alter basic cultural values—this takes a long, long time.

"If we haven't had a flourishing modern art, it is not because we lacked artists with inclination and talents in that direction. It has more to do with the fact that it takes a long time to develop an atmosphere in which this kind of work can be properly understood and appreciated. The response to Picasso's work is encouraging because it shows

Moscow book store: "People now are capable of digesting literary works of stature."

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that our people have been developing their artistic capacities.

"In painting, it is not accurate to say that we have been devoid of innovation or radical ideas. I know that some outsiders feel we have made all sorts of absurd claims about being the first to invent anything of importance. But it is a fact that what is now known as modern or abstract art was first developed in the Soviet Union.

"At the time of our Revolution, we had a sudden flowering of abstract artists. Very quickly, a whole new group of modern painters sprung up and produced some excellent work—a great deal of it.

"The State acquired large numbers of these canvases and sent them to local museums throughout the country. But local tastes favored the old academic approach, and most of the modern or cubist paintings were put away in storerooms or reserve collections. I remember the comment of a lady back in 1918 when she saw one of these cubist paintings on exhibition in a town not far from Moscow. 'It's the work of the devil,' she said.

"I fear that this viewpoint came close to expressing the reaction of the workers from the villages at the time. They were mystified and perhaps even resentful. But now, gradually, the cubist and abstract paintings are coming out of the storerooms and reserve collections. Not long ago, a work of modern art was brought out for display in a small town in the center of Russia. The manager of a café objected that the painting was ideologically bad for the workers. But the workers met and passed a resolution calling for retention of the painting. They won. I learned about this event and told the artist about it. He was overjoyed and said, 'This means more to me than the highest prize.'

"This is another instance of the audience showing its growing maturity. Almost everyone now goes to museums. We are becoming art conscious.

"Now for architecture. We didn't get into a widespread building program until 1928. Le Corbusier came here at the time. So did some of the leading architects from the Bauhaus. They saw us as a nation ready to be subjected to every radical idea that had occurred to them. We were a stage for architectural experimentation. Le Corbusier built a house. It was fine; but it was brutally cold in winter and diabolically hot in summer—no matter what contraptions you used inside. Passing from Le Corbusier and speaking in general: the worse the building materials, the greater the ornamentation. It's like a cheap cigarette lighter. Notice how they try to cover up the poor workmanship by the flossy design. In the Twenties we had poor building materials. With it went the curlicues and everything else extraneous in design.

"Those homes of the late Twenties we now refer to as 'coffins.' But they sheltered us. And the first generation of peasants who came to the city were no doubt happy to have them.

"Since then, tastes have changed. We still build ugly homes—but the prospects on the whole are good. We have a growing awareness of what is ugly and what is not. We can recognize poor workmanship and poor materials. As a result, there has been—and will continue to be—an up-grading in quality both with respect to design and materials."

MRS. EHRENBURG, a gracious, attractive woman, interrupted us cordially in order to serve tea and cakes. I took advantage of the social break to ask Mr. Ehrenburg about his writing routine. He said he tried to spend as much time as possible writing at his country house, though his activities in Moscow made it necessary for him to spend a fair share of the time in town, where he kept his apartment.

When Mrs. Ehrenburg poured me a second cup of tea, I asked him about his feelings in the Pasternak case.

"It's a bad situation all around. I'm afraid that Pasternak and his book are the casualties of the Cold War. He wouldn't have received such adulation from the outside or such scolding from the inside if the United States and the Soviet Union were not caught up in so many tensions."

I asked Mr. Ehrenburg if he would like to hear about the reasons behind the reaction of so many American writers and critics. He smiled and said he thought he was probably familiar with such arguments. I replied that I was actually trying to set a polite stage for a statement of my own view. He kept smiling and told me to proceed.

I said that in discussing the Pasternak case with Russian critics or writers, I would be told that there was no question about the fact that the book ran counter to the spirit of the Revolution. In listening to this argument, it seemed to me that the Russian critics felt it was necessary to prove that the book was guilty as charged.

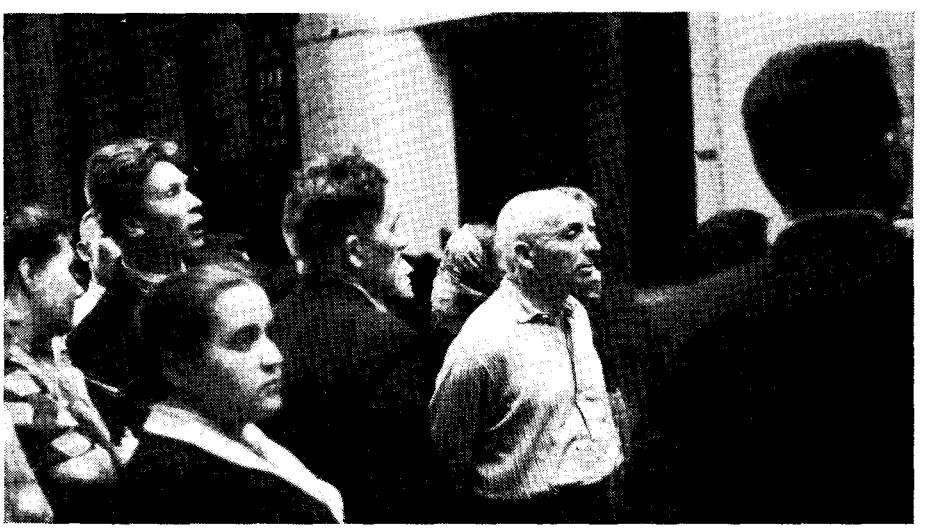
But this question was completely irrelevant, as we saw it. Let us suppose that "Dr. Zhivago" *was* counter-revolutionary. Why should this make any difference? Why shouldn't an author have the right to be wrong—wrong, that is, from the accepted or prescribed position? Why shouldn't the public—and not an author's fellow writers—be given the power to evaluate the true position of a writer? Moreover, Pasternak's punishment inside the Soviet Union did not begin until after he received the Nobel Prize. Then it was that he was condemned so fiercely. What about the question of proportion? What crime did Mr. Pasternak commit that should have produced such drastic punishment: virtual excommunication? After all, Mr. Pasternak was not a member of the Nobel jury that gave him the world-wide acclaim.

Mr. Ehrenburg stood up and walked over to the window. He is a man of sixty-eight. I had been told that he works to the point of extreme fatigue. I felt guilty for having taken up so much of his time and I stood up to leave.

He asked me to be seated. He said he didn't want me to think he was getting up because he had another appointment; he just felt like stretching.

"About Pasternak. Naturally, I have my own opinion. I have high regard for him as a poet. I have my reservations about him as a novelist. But that is neither here nor there. I said a moment ago that I thought the whole 'Doctor Zhivago' case was the tragic product of the Cold War. What happened has happened. My concern is to see that we

(*Continued on page* 44)



Russians at an exhibition in Moscow. "We are becoming art conscious."

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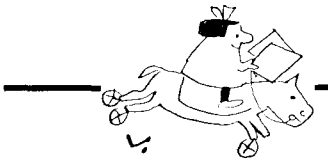


LITERARY HORIZONS

John Hersey's Message

By Granville Hicks

JOHN HERSEY has written five novels, the fifth being **"The War Lover"** (Knopf, $5), which has just been published. Of the other four I have admired all but one, "The Marmot Drive," but I have been moved only by one, "A Single Pebble." "The Wall," which has been his most esteemed work of fiction, was, I felt, magnificent in its own way, but it seemed to me a triumph of research rather than a triumph of the imagination. That Hersey was able to give such a richly detailed account of life in the Warsaw ghetto during World War II was amazing, but except at rare moments I remained on the outside looking in.

"The War Lover" is a novel about the operations of the Eighth Air Force in 1943, and, like "The Wall," it must be in large part the product of research. As a war correspondent, Hersey may have flown in Flying Fortresses, but the detailed accounts he gives of the craft can only be based on knowledge he has carefully acquired. They are impressive, these accounts. He tells where each member of the crew is situated and what he does. He describes a score of raids, each clearly differentiated from the others. He talks well about strategy, about weather, about all sorts of topics. Since Flying Fortresses are now as obsolete as the *Monitor* and the *Merrimac*, his researchers have an antiquarian air, but they have been remarkably thorough.

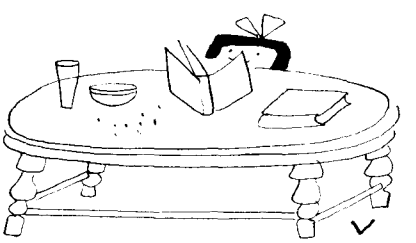
Hersey, of course, is not describing Flying Fortresses just for the pleasure of describing them, although it is obvious that the process of description gives him considerable satisfaction. This is a novel about men, not machines, and it asks and attempts to answer some fundamental questions about human beings and the nature of war. It is primarily the story of two men, Captain Marrow and Lieutenant Boman, pilot and co-pilot of a Flying Fortress called *The Body*.

The structure of the book is worth examining. The first chapter is entitled "The Raid, 0200–1119 hours," and it follows the crew of *The Body* from the time they are wakened for a mission to the moment the ship is airborne. Then comes a chapter called "The Tour, March 1 to April 17," which goes back to the crew's arrival in England five or six months earlier. "The Raid" and "The Tour" alternate until the account of the tour has reached the eve of the particular raid, *The Body's* twenty-fourth, with which we have been concerned. The novel then mounts to its climax in "The Raid, 1604-1656 hours."

Bowman tells the story, but attention is focused on Buzz Marrow. Marrow is loud-mouthed, given to boasting about his prowess with women, an aggressive fellow and something of a bully, but, as Boman sees him, a superb pilot. Boman gives plenty of examples of Marrow's audacity and resourcefulness when he is at the controls of *The Body*, and we can see why the members of the crew feel that he is invulnerable. Gradually, however, Boman comes to understand that Marrow has not only defects as a human being but also fatal weaknesses as a fighter.

BOMAN makes some of his discoveries for himself, but his final enlightenment comes by way of a girl named Daphne. Boman meets Daphne soon after his arrival in England, and the affair that he carries on with her is at first an agreeable relief from the arduous and perilous duties in which he is engaged, and in the end something more than that. Daphne has had experience with men at war, and she knows from the start what sort of person Marrow is. Her insight is confirmed when he tries to seduce her. He is a man who loves war because killing gives him an acute satisfaction, a satisfaction that is essentially sexual. His one great passion is for destruction, and, as Daphne tells Boman, he is bound to destroy himself as well as others. How sound her analysis is Boman learns in the course of the twenty-fourth raid.

The trouble is that Marrow, though he fools Boman for a time, never deceives the reader. Hersey's method, indeed, with its way of moving back and forth in time, guarantees that there can be no suspense. When Boman sets out on the twenty-fourth raid, he knows what Daphne knows, and he does not conceal his knowledge. Thus we read on page 17: "There would never be peace so long as there were men with Marrow's taint." And again and again there are allusions to Boman's final judgment of his pilot. If Hersey had permitted the great discovery to dawn on our minds as it dawns on Boman's, we might have been moved by it, but he lets us in on the secret from the very start.



The only explanation I can find for what seems an elementary mistake in narrative technique is that Hersey is dead in earnest about Marrow and his type. In the first half of the book Boman says, "He was in love with war. I could have no peace—the world could have none—if men like him were indulged in their passion." And Daphne, after she has made her great revelation to Boman, asks, "Why do you men have a conspiracy of silence about this part of war, about the pleasure of it?" She goes on: "Why do you keep silent about the reason for war? At least what *I* think is the reason for war: that some men enjoy it, some men enjoy it too much."

That seems to be the lesson of the book: "the reason for war" is the fact that some men enjoy it. I am sure that some men do enjoy it and that Hersey has given a reasonably perceptive account of such a man. But I do not think there is *a* cause for war—psychological, economic, or anything else—and I don't believe that Hersey really thinks so either. In this book, however, he has quite been carried away by his distrust of the lovers of war.

Boman, who says, "I was for life, and against death," balances Marrow. Hersey is too wise to make Boman either a hero or a saint. Boman is conscious of some of his shortcomings, and Daphne points out others. But the weakness that makes Boman plausible helps to obscure his role in the novel. Daphne tells him, "You certainly can't give all humanity a complete love when you can't even give it to one human being." This sounds reasonable enough, but I wonder what, in Boman's situation, it would mean if he were capable of a complete love for all humanity.

What I'm saying, I'm afraid, is that "The War Lovers" is neither satisfying as a piece of fiction nor convincing as a message. That is a pity, for one has to respect Hersey's seriousness, his conscientiousness as a reporter, and the literary competence he always displays. But once more, as in "The Wall," the qualities essental to literary greatness—and Hersey aims high—are lacking.

One minor observation: either Hersey or his publisher has chosen to represent the once-taboo Anglo-Saxon monosyllables with first letters and blanks. The result is to call attention to them in a really startling fashion.

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FLORA AND FAUNA

The Wildlife of Manhattan

"A Natural History of New York City," by John Kieran *(Houghton Mifflin. 428 pp. $5.75), scrapes the asphalt from Gotham, revealing a brand new portrait of the Eastern metropolis. Hal Borland is the author of a number of books about nature, among them "This Hill, This Valley" and "The Enduring Pattern," to be published next month.*

By Hal Borland

MAN IS an arrogant creature who tends to think and speak of this as his world although his tenancy here is tenuous at best and he is outnumbered many times over by dozens of other forms of animal life. Man is particularly arrogant about his cities, and often strangely sentimental about the open country; the city is man's province, and you go to the country to find "nature." Thus the folklore puts it. And then a book like this comes along and proves that the folklore is so much nonsense, that America's biggest city actually is full of "nature." So full, in fact, that John Kieran says on the last page of this splendid book, "No man will ever live long enough to learn all there is to know about the wildlife that exists in this great city."

Mr. Kieran, however, began learning early and kept at it long enough to know a great deal about the plants, the animals, the birds, the fishes, and the insects that anyone with seeing eyes and active curiosity can find in New York City. Here he has organized and summarized that knowledge, leavened it with personal experience, and salted it with reflection and opinion. The result is a brand new portrait of New York City which sparkles with butterflies, twinkles with wildflowers, and echoes with birdsong.

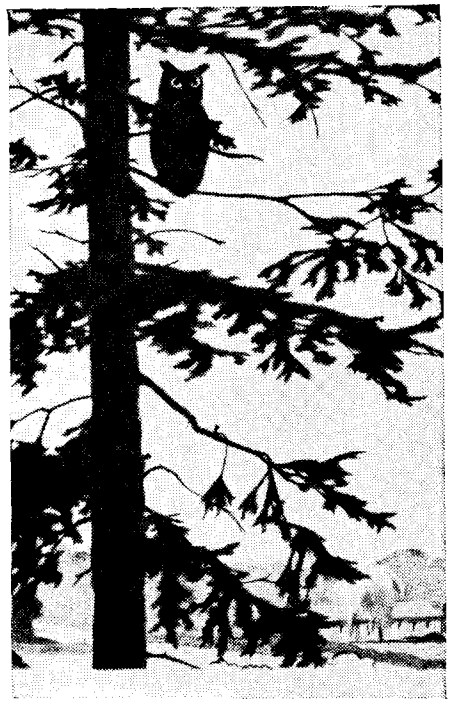
All kinds of surprises appear. In his section on the city's geology Mr. Kieran points out that many semiprecious stones have turned up in the city's underlying rock: aquamarines, amethysts, tourmalines, and even an egg-size garnet. He tells about various encounters with foxes, of a vixen playing with her cubs along the Henry Hudson Parkway and of a gray fox that may still make its home in a culvert in the Spuyten Duyvil area. He tells how, by a combination of circumstances, a prairie horned lark nested and raised a brood on a public baseball diamond in Van Courtlandt Park. He tells of spotting twenty-nine species of warbler in one day at The Ramble in Central Park. He reports seeing eighty-eight redtail and redshoulder hawks during a football game at Baker Field. "This," he adds, "verges on the commonplace," a statement that probably will astonish many Manhattanites.

Of the book's various sections, those on insects, birds, and flowers have the greatest richness and variety. Perhaps they most interested me because birds, insects, and flowers persistently link city and country and can be seen and appreciated by any city dweller willing to look and learn.

As Mr. Kieran points out, the human population of the city, huge though it is, amounts to only a handful in comparison with the insects. He makes no estimate of the total number of insect species common to the city but he indicates that there must be around 500 varieties of butterflies and moths, more than 250 varieties of flies, gnats, and mosquitoes, and more kinds of beetles than flies and gnats. The total numbers of insects, of course, are beyond counting.

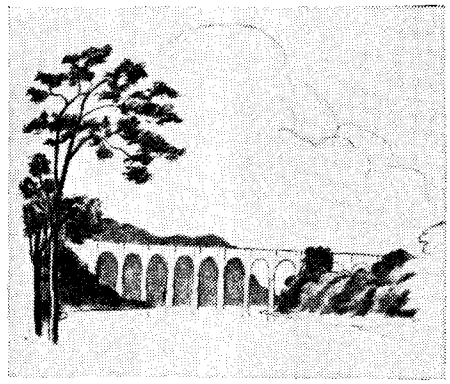
Moreover, the city is fortunate in having shore, marshland, woodland, and upland, all with their characteristic bird populations. Mr. Kieran says he has good ears, and he proves it with his list of songbirds. As he points out, New York City benefits by being on major flyways for migrants and also by being in that happy margin between the chosen habitats of northern and southern birds, an area of rich overlap. The bird section reflects Mr. Kieran's ornithological enthusiasm and broad personal knowledge. The same warmth of experience marks the section on wildflowers. The author knows where the common wildlings grow in abundance, and he knows where the rare ones hide. He has sought them out, and he tells his readers where to go to find them.

That is one of the special virtues of this book, the way Mr. Kieran urges the reader to go and see for himself. He points not only to New York's parks, shores, and woodlands, but to museums, collections, and libraries that can aid the searcher. He is a good guide and a happy companion, and he has a knack of sharing his enthusiasm.



—From the book.

Henry B. Kane's illustrations of "Hemlock" (above) and the Croton Aqueduct (below).



No doubt the armchair reader anywhere will find parts of the book fascinating, but it is not, as the publishers say, "a book for sidewalk naturalists everywhere." It isn't a book about city wildlife in Atlanta, say, or Chicago, or San Francisco. It is about New York City and the way nature persists in that city and the immediately adjacent area. For New Yorkers it is a first-rate guide, probably the best ever written. For readers elsewhere it is an account of one man's search for nature in America's largest metropolis.

As Staten Island's famous "Cicada Man," the late William T. Davis, quoted by Mr. Kieran, said, "There is no need for a faraway fairyland, for earth is a mystery before us. The cow paths lead to mysterious fields." New York City probably hasn't a cow path left, but John Kieran has followed any number of other paths that lead to those "mysterious fields" in New York City itself.

The book is beautifully illustrated by Henry Bugbee Kane, and it has a full and useful index.

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Skeleton in the Human Closet

"Adventures with the Missing Link," by Raymond A. Dart with Denis Craig *(Harper 255 pp. $5), says that man's cussedness is inherited from* Australopithecus africanus. *A professor of anthropology at the University of Pennsylvania, Loren Eisley is the author of "The Immense Journey" and "Darwin's Century."*

By Loren Eisley

"THE ABORIGINAL man," wrote Emerson in the years immediately following the publication of Darwin's theories, "is not an engaging figure. We are very glad that he ate his fishes and snails and marrow bones out of our sight and hearing and that his doleful experiences were got through with so very long ago." One can sympathize with the sensitivity of the great transcendentalist. The truth is, however, that the course of paleontological research in the hands of Professor Raymond Dart and his associates of Witwatersrand University in South Africa has brought before us as unappetizing a group of human ancestors as it is possible to imagine. Since Dart is inclined to attribute to these unsavory folk the ancestral cussedness which, in more refined and developed forms, has led on to the atom bomb and the concentration camp, it would appear that we can no longer safely avert our eyes from this ancient creature of "doleful experience."

Emerson wrote in a time of enlightened optimism about man as a creature of conscience and inextinguishable hope. In the years since, a great deal of this optimism has vanished. The murky reaches of the human subconscious have been explored by the depth psychologists. Our earlier naïve faith in the rational character of the human mind has undergone considerable attrition. "Adventures with the Missing Link," though ostensibly a popular account of Professor Dart's discovery of that family of South African fossil man-apes scientifically known as the *Australopithecinae*, bears, in reality, upon the nature of the human animal—as he was, and as he is, after the passage of perhaps four ice-advances and a few trifling and soiled millennia of civilization.

In analyzing so captivating a book one must, of course, distinguish between the undisputed fossil evidence which Dart and his colleagues have provided, and Dart's interpretation of the psyche of this early human or near-human primate. In 1924 at a lime works near Taungs, in the Transvaal, the skull of an infant anthropoid was discovered, which Dr. Dart immediately insisted had human affinities. At this time the attention of anthropologists was largely centered upon Asia as the probable early home of man. Dart's find, though not totally ignored, was viewed with skepticism by most leading authorities. The fact that the specimen was that of an infant increased doubt as to the appearance of the adult form and led to suggestions that the specimen was that of a creature not remote from the living apes.

More extensive postwar discoveries led to the realization that Dart had been right in his basic assumption that *Australopithecus africanus* had walked upright and had possessed a surprisingly human pelvis and dentition. Only the brain, whatever qualitative differences it may have possessed, had lingered within the anthropoid size range. The man apes, in other words, were true missing links—creatures so close to the human borderline that in spite of their human posture it was difficult to determine whether they could be said to speak or use tools.

Dr. Dart, on the basis of extensive analyses of broken and fragmentary bone found at the sites frequented by the man-apes, has postulated a cultural stage in which these small-brained men used the bones and horns of large animals as clubs and stabbing weapons. Already at this level, Dart insists, man was a ferocious and formidable carnivore. Since there was little or no shaping of weapons at this time, the interpretation of some of these bone fragments has caused many hot arguments among anthropologists, not all of whom are prepared to go the full way with Dr. Dart. It must be said to Dart's credit, however, that it was his imaginative insight and adventurous mind which first opened this wholly new evolutionary plateau to scientific investigation.

Dart seems to imply at times that the *Australopithecines* conducted themselves as brutally toward their kin as toward their prey. At this point a serious question emerges. With all due recognition of a strain of latent and often overt sadism in the human stock, it must be borne in mind that only with the lengthened love and care of the helpless human offspring, only with the cooperation of human males, only with the enduring devotion of the human family has man been able to evolve in the direction of enlightened altruism. No catalogue of human crime and folly can erase the nobler aspects of the human drama, nor do I, for one, believe that, even on the windy grasslands of the first ice age, man was solely a murderer and destroyer of his own young. Probably Dart does not really believe this either, but he paints so stark a picture that the opposite aspect of man is overshadowed. Yet Dart himself, in a chapter emphasizing the animal's ruthless behavior toward its kind speaks of "infants to feed and perhaps toothless old men and women." If man had actually been so completely monstrous a creature as is here delineated, it is unlikely that he would have survived at all.

These, however, are the questions, the hazy inferences, which the scientist must derive from the broken bones of creatures the nature of whose demise is difficult to read. Parts of "Adventures with the Missing Link" will arouse controversy. But Dr. Dart, its senior author, is long used to that. His views as a pioneer field worker deserve the utmost consideration from the scientific public. His book is a lively and vigorous account of great discoveries.

—From the book.

Australopithecines overturning stone for insects—"Only the brain had lingered."

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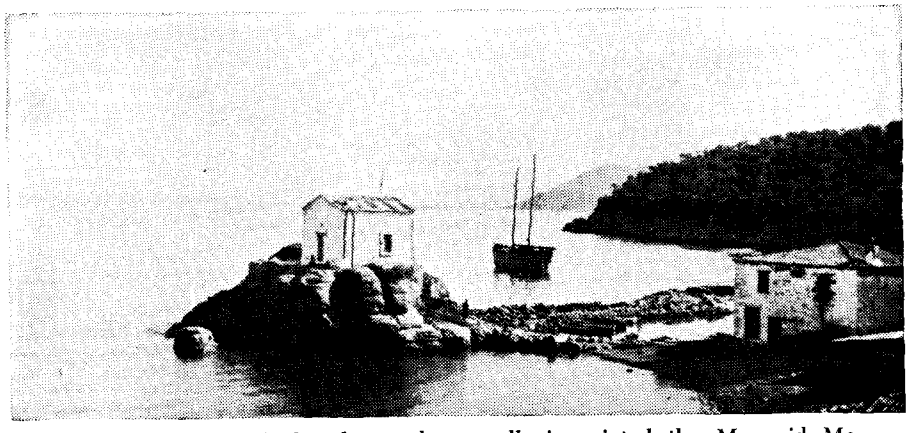
FICTION

Legend of the Sea Around Her



The Mytilene Island chapel on whose walls is painted the Mermaid Madonna icon—"One of those links between Olympus and Paradise . . ."

"The Mermaid Madonna," by Stratis Myrivilis; *translated by Abbott Rick (Crowell. 310 pp. $5), is a tale of fishing people on an Aegean island and of a young girl who lives again an ancient legend. Mary Renault, whose books include "The King Must Die" and "The Last of the Wine," has traveled widely in Greece and Asia Minor.*

By Mary Renault

TO CREATE a charmed belief in the impossible is the traditional trademark of the master. There is also a profitable line in giving actual fact the glossy plastic finish of fiction, lest the customer be made uneasy by any effort-demanding intrusion of truth. He may consent to believe even the possible, once the core has been taken out.

One of the rarest and headiest scents a book can give off is the smell of authenticity. A world is opened to us at all the levels of reality—visual, social, spiritual. No one is selling it to us, toned-down or hotted-up; its sorrows are harsh with life, its beauties innocent. "The Mermaid Madonna" is such a book.

The Greek islands of the Aegean have so illuminating a landscape, so clear and brilliant a light, and give a sense of continuity with the past so powerful and exciting, that they have defeated description again and again. Writers have brought along their associations, their sensibilities, their Leicas, and written lovingly in the visitors' book. A few—Liddell, Leigh-Fermor, Durrell—have felt their way in and achieved a synthesis. Stratis Myrivilis has no need. He was born, like Sappho, in Mytilene. I think she would have heard this tale through to the end, and listened with understanding.

It begins in 1922 when the littoral of Asia Minor, immemorially Greek, was sacked by the Turks with archaic barbarity, and the remnant of the Greeks fled across the narrow straits to Lesbos, Samos, and the rest of the Dodecanese. (Mr. Myrivilis was there; and, reading, one does not doubt it.) The stresses between the refugees and their new hosts, each cherishing personal individuality and local tradition, as all Greeks do, are rendered with firm and unforced truth. So is the living folklore, whose roots go down and back through the centuries of Moslem occupation, through the Middle Ages with its Venetian walls and knightly princes of Achaia, through Byzantium and the rule of Rome, to the days when Achilles called to his goddess mother where she sat in the depths of the sea.

In this tale, these superstitions center round a foundling girl, laid by her unknown mother in a fisherman's moored boat, and reared by his wife in place of an only daughter lately dead. The girl grows up strong, beautiful, an able fisher and sailor, but solitary—an Atalanta who flies from her suitors, and is bewildered by her own power to give such unmeant pain. Local gossips remember the legend of the mermaid who will seek a human youth to mate with, but will abandon her mortal child upon the shore.

When it is saved and lives, it is different from all others in character and appearance. It grows to be very beautiful. It has the marks of the nymphs, you see. It becomes very clever, but all its life it is drawn to the sea. If you take a nymph foundling and bring it up on land far from the sea, it wastes away and dies. The salt air nourishes it and gives it strength like wheat bread. And it is said that while it lives among men, it brings either great good fortune or great misfortune.

It is like the opening of a Menander comedy, with its generous humanity and firm, ingenious planting of the plot. And soon one is so engaged that one half hopes for a Menander climax: the arrival of the noble parents, the happy recognition, the kind and daring suitor justly rewarded. But the end when it comes is inconclusive and sad. It ends like a tale one might hear told in the *kaphenion* of just such an island village. Indeed, the book lacks form; but the medium is always under the control of the artist, and the indeterminacy is that of life.

The Mermaid Madonna of the title is the local ikon, painted on the chapel wall by an old seaman turned hermit—one of those links between Olympus and Paradise in which Greece abounds. She is well described; one can visualize her in her austere, olive-dark Byzantine mystery, smiling her archaic smile. This makes the trite and trivial jacket, than which nothing could be more foreign to the feeling of the book, peculiarly irritating.

FRASER YOUNG'S LITERARY CRYPT NO. 850

A cryptogram is writing in cipher. Every letter is part of a code that remains constant throughout the puzzle. Answer No. 850 will be found in the next issue.

FAR CHOW DA LA

FARM ANY BMANPYB

RT YA GHDDWM CAN

DHXX FARM BMHYLTH NHK.

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Answer to Literary Crypt No. 849

Don't tell your friends about your indigestion: "How are you?" is a greeting, not a question.

—ARTHUR GUITERMAN.

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Sins and Sorrows

"One Hour," by Lillian Smith *(Harcourt, Brace. 440 pp. $5), tells of the whirlpool of events that circle the alleged rape of a child. Edmund Fuller, who teaches at Kent School, is the author of the critical study "Man in Modern Fiction."*

By Edmund Fuller

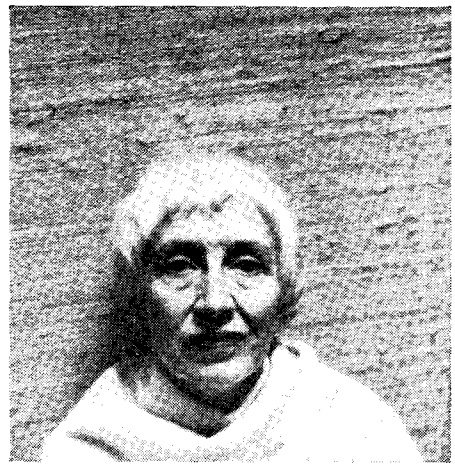
LILLIAN SMITH has attempted in "One Hour" so ambitious and well-intentioned an enterprise that one can only admire the reach and wish it were successful. Unhappily, it does not succeed and, by an inexorable law of life and literature, the very magnitude of the endeavor contributes to the magnitude of its failure. Yet it is an honorable failure; it does not rob her novel of its high purpose, of genuine though inevitably flagging interest, and of a few striking moments.

The core of the story is the accusation of the rape of a child, leveled against a brilliant scientist in cancer research. It ruins his career and his personal life. There was no rape. The case sprang basically from the fantasies of a disturbed child combined with certain compulsions and obsessions in her mother.

Miss Smith's narrator is David Landrum, a Virginian, thirty-eight years old, rector of All Saints Episcopal Church in a Southern city. He lost a leg as a chaplain in the Air Force. The accused man, Mark Channing, is his intimate friend and also a vestryman.

Powerful material is latent in the situation. The control of its force requires focus, discipline, compression, and understatement. Miss Smith, instead, resorted to diffusion and excessive emotionalism, though the latter is not vulgarly obvious.

She has packed in so much that she clutters up her study of the causes and effects of such an event. She wishes to trace the outward moving ripples from the scandal's impact throughout the whole community and beyond it. Race prejudice becomes involved; charges of Communism; sabotage of a laboratory by borderline mental cases; the death of the Channings' son in a blizzard into which he wanders from his New England school when an anonymous letter gives him the news about his father; the death of the church organist, a promising composer, at the hands of hoodlums; an affair between the priest-narrator and Mark Channing's wife, and other sub-subcomplications. Any one of these might be defended, but cumulatively they destroy their effectiveness.



Lillian Smith — "Novel of high purpose."

Moreover, the book is psychoanalyzed to death. Again and again, with character after character, comes a variation on the theme: "It's a memory I have. When I was a child . . ." Once in too deep, there is no way for the novelist out of this swamp of fragmentary case histories passed off as characterizations.

David Landrum, a self-conscious literary-theological name-dropper, is a desperately muddled priest (at least he knows it), who struggles to see all sides of everything, and is exasperating in his genteel, liberal, minor-key agonizing. He allows himself to be drawn deep into the rationalizations of private morality.

There is some analogy between what Miss Smith attempted and what Alan Paton achieved, through brilliant control and focus, in "Too Late the Phalarope." Miss Smith's effort to encompass all the sins and sorrows of man, to create a microcosm to end all microcosms, to be liberal, just, righteous, and realistic, to be social caseworker, spiritual counselor, and clinical psychologist, all at once, falls by the weight of its over-elaboration.

Poirot-Delpech—Slackened cynicism.

Lust and Love

"Fool's Paradise," by Bertrand Poirot-Delpech; *translated by Cornelia Schaeffer (Harper. 149 pp. $2.95), and* ***"Warrior's Rest," by Christiane Rochefort;*** *translated by Lowell Bair (McKay. 214 pp. $3.75), are each novels in which the characters reject France's postwar society and find solace only in the love relationship. Robert Phelps, the author of "Heroes and Orators," frequently comments on French fiction.*

By Robert Phelps

BOTH of these first novels are lively, competent, and engrossing to read. Both are about love affairs as the French see them, in which the flesh is sovereign, delicious, despotic, and the spirit has no veto. Both, too, are about members of the postwar generation, the J3s, as they are called in France, after the numerals on their Occupation ration cards; and finally, each received one of last year's literary prizes, which usually promises, along with readability, some symptom of either interest or revelation.

"Fool's Paradise," the less interesting of the two, is about a teen-ager's fling with a showgirl. The original title was "*Le Grand Dadais*" ("The Big Ninny"), and though this would not have made an especially attractive label in English, it does apply more aptly to the behavior of the well-brought-up, war hero's son, who skips a summer with his boy scout troop to run off on a Riviera spree with a strip teaser who, in turn, he is under the impression that he is a cub reporter.

The best part of the story—as usual in a French novel—lies in its unbookish insight into physical desire; schoolboy Alain's romance is narcissistic and greedy, but its progress is described with brisk, authoritative detail. It all ends in a night-club brawl, with an accidental death and Alain brought scandalously to trial. It is his half-rueful, half-flippant commentary during the courtroom flashbacks that sets the novel's tone. Though wholly cynical about all the social values, fronts, and niceties he has offended, he acknowledges that he is tamed. His wild oat has been sown. When he emerges from prison, he will be unanarchic, modest, and only anxious to marry securely and settle down. "Our cherry days," he concludes, "never come back."

It is in something of the same mood of slackened cynicism that Renaud, the alcoholic hero of "Warrior's Rest,"

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Christiane Rochefort — Celebrates the one-to-one exchange of human need.

warns his mistress: "Things are what they are, that's a truth everyone forgets . . ." Older than Alain, Renaud began to drink in earnest the day he heard about Hiroshima, and he has remained a deliberate, unregenerate drunk ever since, shameless, sponging, not even particularly self-pitying. He has even tried suicide, only to be thwarted by Genevieve, a nice student with a legacy. She falls in love at first sight, and when Renaud recovers, he brutally reminds her that his body and soul are now her responsibility. Again, the center of the story becomes the particular, purely carnal relationship between a man and woman, and in the end, personal need overwhelms Renaud's distress about society. He marries Genevieve and enters a hospital for a cure.

In both novels the principal characters observe familiar, postwar attitudes. They are contemptuous of society's forms, bitter about its failures, ruthless to call its bluffs. They reject community values *in toto*. What remains, what they cannot reject because it precedes all their public opinions, are personal relationships—the private, one-to-one exchange of human need, or desire, or trust. Harsh and consuming as this use of the self may be, it is always the real, unrhetorical one, by which a man makes an empirical expense of his spirit or lust, and by which, sometimes, he learns what it is to love and be loved by someone else. Editorials, anxiety, or despair about large-scale human events, are easy, after all. It is loving one person that can be dangerous and hard; and rewarding.

From "Daphnis and Chloe" to Racine, from Baudelaire to Colette, French writing has again and again celebrated the smallest community possible—between husband and wife, lover and mistress, friend and friend; furthermore, it has proclaimed that this "I and Thou" relation, whatever its form or quality, is the heart of every larger society which is desirable. It is what Renaud has begun to learn—that in spite of even the atomic bomb, he is loved; and it is what Alain is ready to learn. It is the moral implicit in 2,000 years of French literature, which even their slightest seasonal best-sellers reflect, embody, and endorse.

CIPHER FIRE: Harry Bloom, in his first novel, "**Sorrow Laughs**" (Abelard-Schuman, $3.95), shows skill in the use of Jewish-American material, but his book contains nothing original enough to differentiate it from others drawing on the same source.

The novel deals episodically with the impact of a pyromaniac on four families in the Minneapolis ghetto during the depression. The center of attention is the Silverman household. The widow Silverman and her two sons—Bushy, a small-time gambler, and Miltie, a cold intellectual—are supported by her brother, Max. Bushy has his first big win and lends Max money for one of the uncle's mysterious business deals. After Max is murdered by the firebug, Bushy is arrested because his check was used to buy the stolen property Max dealt in. Bushy goes to jail in order to save his mother from the knowledge that her beloved brother was crooked. Although Bushy's redemption by means of this one generous act in an otherwise wholly venal life is convincing, it is undercut by the reader's suspicion that Max was far too shrewd to handle his transactions in anything but cash.

The aimless malevolence of the pyromaniac—a man who has discovered that he is a cipher and who asserts his existence to himself by starting fires—has a catalytic effect on other lives. An anti-Semitic couple modify their prejudice, a husband walks out, and a rabbi comes to understand that his own deep faith is constrictive.

Mr. Bloom's use of Yiddish local color is competent, and his emotions are genuine. But his material requires the transcending power of a Malamud or a Mankowitz. Wanting that, "Sorrow Laughs" is an honest book, an ambitious book—but not the profound commentary on the human spirit that it seems the author intended.

—Matthew J. Bruccoli

—Jacket art from "Sorrow Laughs."

The aimless malevolence had a catalytic effect on other lives.

HEMINGWAY MANQUE: Spasmodically since the Second World War a series of Hemingway imitators have been writing novels to prove how much more lost their generation was than that of the Twenties. In the Forties, when manuscripts were scarce and the idea was fresh, there was some reason for publishing them. Even as recently as last year Vance Bourjaily showed, with "The Violated," that such books could be successful. But with the appearance of the latest variation on this theme, Tom T. Chamales's "**Go Naked in the World**" (Scribners, $4.95) a good many readers are going to be crying "enough!" I am willing to go so far as to say "uncle."

This time the situation is spiced with a Greek-American setting, not the homey transplanted-peasant *milieu*, but that of sneaky and big theatre, restaurant, and real estate operations. "It's funny about Greeks, immigrant Greeks," one of the characters says to a Jewish banker. "They only trust each other—then they end up screwing each other. They're narrow. You don't give a damn who you lend money to, do you? As long as it seems a good risk. I'm sure you don't. I'm sure you wouldn't favor a Jew just because you're a Jew. But there's lots of Jews who would. That's narrowness."

Into this world bursts a twenty-three-old veteran, Major Nick Stratton, reluctantly returning to the home and maneuverings of his father, head of a Chicago motion-picture syndicate, a man who has all the charming characteristics of an incubus and a succubus combined. Nick's subsequent drinking and dirty dealings is embellished by his promiscuity, at the heart of which is an affair he avidly carries on with one of his sixty-seven-year-old father's favorite call girls. The writing is unformed Hemingway, sprinkled with misunderstood Joyce, and the action more frantic than Kerouac.

There is undoubtedly something to be said about the quirks suffered by the veterans of the Second World War as a result of their having had their youth amputated. There is a great deal to be said about the weight of a double heritage on the children of immigrants. And there is still a rich vein of fiction to be mined in the misunderstandings between generations. But simply to use these themes as salt and pepper on a story that chronicles little but bar to bed to bar, with intermissions of fishing in the Florida keys, is as tawdry as it is secondhand.

—William Bittner.

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Our Best Defense: An America Armed With Knowledge

In his welcoming speech to Nikita Khrushchev, President Eisenhower pointed out that in the United States the government is run by the American people, who, the Soviet Premier would find, are a peace-loving polity. To retain that all-too-rare privilege, it behooves the average intelligent citizen, as well as the Federal policy-maker, to visualize the kind of world he would inhabit, learn as much as possible about the opposition, and at the same time knowingly guard himself against destruction. Three new studies will help to orient his thinking: ***"Beyond Survival," by Max Ways*** *(Harper. 250 pp. $4);* ***"American Research on Russia," edited by Harold H. Fisher*** *(Indiana University Press. 240 pp. $5), and* ***"Strategy in the Missile Age," by Bernard Brodie*** *(Princeton University Press. 409 pp. $6.50). The first calls for a foreign policy consistent with the American ideal of a sane global society; the second examines the USSR; the third analyzes the military policies and strategies of the United States. The books are evaluated respectively by August Heckscher, director of the Twentieth Century Fund; Alexander Dallin, associate professor of international relations at the Russian Institute, Columbia University, and Brig. Gen. Thomas R. Phillips, military analyst of the* St. Louis Post-Dispatch.

I. Citizen State Dept.

By August Heckscher

"BEYOND SURVIVAL" began as an assignment from Max Ways's publisher, Henry Luce (who contributes the foreword). He had been asked to survey postwar American foreign policy as a guide to long-range editorial policies. Mr. Ways is a reflective and philosophical man, so that his survey grew into a basic inquiry, and his memorandum expanded to a book. It is a good book, argued with seriousness and setting forth a point of view which may still be in the minority but which, I venture to say, is likely in time to become the prevailing one.

The argument is for a foreign policy based upon other calculations than those of national interest, survival, geopolitics, realism (so-called), or even peace. He wants a foreign policy which derives from purpose, and the purpose must be our ideal of a sane world order.

The order Mr. Ways conceives will evidently have many ingredients characteristic of the United States, but, as he sees it, it will rest on law, accepted ways of dealing and of adjusting disputes, rather than on political, economic, or social dogma.

The idea of law runs through the book. Sometimes Mr. Ways seems to be thinking of international law in the textbook sense, sometimes of a more vague but fundamental body of agreements and understandings. In a litigious age, he remarks wryly, only the World Court is without work; but then again he speaks as if the law were the embodiment of the American idea, the essence of our unique national experience. It is perhaps impossible to be too explicit on the nature of the world community or of the law which may ultimately underlie it. Despite its evident importance as an idea and as a goal, the book derives its major interest from its criticisms of present assumptions and theories.

Certainly it is true, as Mr. Ways points out with force and often with brilliance, that the United States has got itself to a point of thinking that ideals are somehow a weakening and confusing element in policy. From an excess of abstract principle we have gone (as we so often do) to the other extreme: an excess of "realism." But this realism, paradoxically, too often leads nowhere. Where the United States has tried to be "tough" it has found its policies inhibited and its voice diminished. Where it has acted firmly according to its own national character, it has fared much better. Evidently we cannot go back to the vague moralisms which Americans of the nineteenth century too often mistook for valid policies. But power and principle can find in a new foreign policy a meaningful relationship.

What is the essence of the American experience which as a nation we must seek to communicate and translate into policy? Mr. Ways is very persuasive indeed in arguing against those who find this experience inherently incommunicable—a subtle atmosphere which cannot be expressed and can be felt only by those who have lived through the whole range of the American story. There are, he maintains, certain broad principles which can be distilled from what as a people we have known and done. They may be simple and even self-evident, but they are the essence of America and must be at the base of any viable policy.

Mr. Ways thus takes policy away from the poets and mystics, as he had already taken it away from the "experts." He restores it to the citizens of a democracy, as something they can determine, criticize, and manage for themselves. Taking up Walter Lippmann's phrase "the public philosophy," Mr. Ways uses it in a somewhat different sense: a widespread agreement among the people about the things that concern their common life. If the public philosophy is clear, the people, he maintains, can shape their actions and make relevant decisions for themselves.

The difficulties of Mr. Ways's approach to foreign policy can be seen when we attempt to apply "principle" to such a tangle as the Suez affair of 1956. On that one we ended by condemning our allies in a vote that found us joined with the Soviets. Mr. Ways, moreover, gets onto what seems dangerous ground in arguing against self-imposed restrictions on the use of force. His emphasis on religion as related to a fruitful foreign policy also seems to me an uncertain note. Do we really oppose Communism because it is atheistic? But these are points subservient to the main theme, and the book as a whole is more important than the items with which particular readers will disagree. It is an honest, searching effort to put the citizens back into the making of foreign policy, and to put foreign policy back on the main line of American growth and development.

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II. The Soviet Studied

By Alexander Dallin

THE AMERICAN academic community has a proclivity for auto-analysis. Its members self-consciously examine their performance, craving congratulation or condemnation. In no area has this stock-taking urge been more pronounced—and more legitimate—than in Russian studies, a field unique in youth, vigor, and talent, in importance and difficulty alike.

Without disparaging the pioneering efforts made prior to the Second World War, it is fair to say that the real impetus for the American study of Russia came in the postwar decade. It is this effort that the Joint Committee on Slavic Studies (the leading coordinating body in the field, sponsored by the American Council of Learned Societies and by the Social Science Research Council) now seeks to review and assess.

It has been a many-sided effort indeed. Some feel that the most successful facet has been the training of some thousand specialists (many now in important positions) at the several graduate centers offering systematic instruction in Soviet affairs. Hardly less significant have been the expansion of library and archival collections, and the unfolding of public, governmental, and especially foundation support. But none has been more phenomenal than the growth of serious American writing on Russia. This is what the volume before us surveys.

"American Research on Russia" is a competent compilation, consisting of eleven essays by well-informed specialists, each covering a different discipline —although there are some gaps and occasional duplications. The scholarly accomplishments in virtually all of these areas are something to be proud of. But the book itself hardly makes inspired reading, in spite of Harold H. Fisher's helpful preface and postscript, and Philip E. Mosely's useful and spirited survey of Russian studies in the United States. There is no consistency among the essays. Some are road maps around ivory towers; others are hard-headed and down-to-earth commentaries. Some are pedestrian lists of who-is-doing-what; others give thumbnail sketches of the major hypotheses advanced in a given field. If the result is a cross between a directory and a critique, it is nonetheless a useful tool—for those seeking topics for promising or much-needed investigation; for those concerned with the state of our knowledge about Russia, and for those who are curious about the development of American research.

Contrary to the traditional lamentations, Soviet studies are no longer an "underdeveloped" field. They have very real accomplishments to point to. In barely a decade American scholarship has moved into the forefront of research on Russia in virtually all fields (except philosophy, where, as George L. Kline shows, Western Europe still leads). Often it deals with problems, sources, or methods which are taboo to scholars in the USSR. It is no less remarkable that in an era as emotion-laden as the past decade virtually the entire fraternity of American researchers on Russia has resisted the *simpliste* formulae of Communist apologetics, the shrill prejudice of McCarthyism, and even the siren calls of cold-war propaganda.

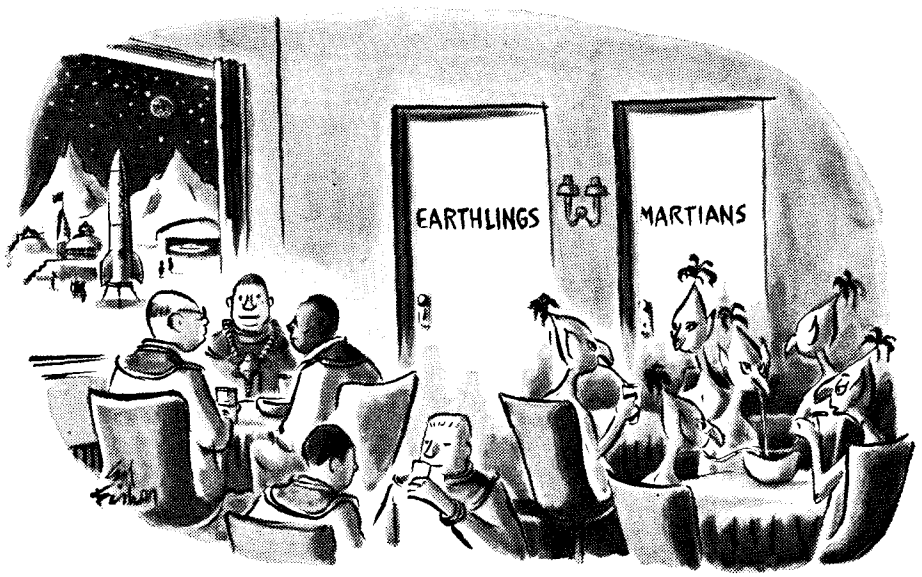
The result of this endeavor is the hundreds of studies discussed in this volume. Among the best are "classics" like Merle Fainsod's "How Russia Is Ruled"; surveys of Russian history such as Michael Florinsky's and George Vernadsky's volumes; outlines of Russian literature, such as the books of Ernest J. Simmons, Marc Slonim, and Gleb Struve. Imaginative pioneering has marked a variety of efforts, ranging from the study of national income (under the direction of Abram Bergson) to the sophisticated investigations of the Harvard refugee-interview project (directed by Clyde Kluckhohn, Alex Inkeles, and Raymond A. Bauer). At the same time, there are literally dozens of serious problems enumerated which no scholar has yet attacked. And there are still no syntheses or even textbooks on Soviet society, foreign policy, economics, and culture.

One reason for these gaps is the recency of the new boom. It takes time to train specialists and to let them think. The mature works have come for the most part from the pens of men—like Fainsod, Florinsky, Vernadsky, or Michael M. Karpovich and Geroid T. Robinson—who began working in this field before the war. There is no "miracle-gro" for insight, and we are lucky enough to have an able *Nachwuchs* even without "definitive" interpretations.

Some of the shortcomings can be ascribed to the peculiar conditions in which Soviet studies have had to operate. It is hard to attract top-notch people in sociology or anthropology without holding out any prospect of field work; it is difficult to find economists who, sacrificing good job opportunities, will toil in an unfamiliar language with frustrating source materials. The consequence has been the necessity to study a society at a distance, to compute laboriously intricate economic indices, and to engage in tedious academic detective work. Pedagogically this has been sound. Methodologically, too, this has had its salutary aspects. Yet, as Gregory Grossman suggests in his able chapter on economics, "digging, whether literal or figurative, is at once ennobling and degrading." Too often the fruits of labor have been what Edward Brown, writing of literature, calls annotated stereotypes.

There were—and are—good reasons for this. Many excellent monographs have been converted dissertations, with all the virtues and vices of the species. Many others have had to clear the ground, plough through unfamiliar terrain, and survey unexciting landscapes before moving on to more thrilling sights. That time has now come. If one theme emerges from this series of papers it is the urgent call for a departure from the descriptive to the analytical, a call to search for patterns and meaning. So

(*continued on page* 42)



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Where Are Our Children Going?

THERE ARE some signs that this country is engaged in a re-examination of values. Living too long on drift, we have begun to seek, to examine, to discuss the reasons for the grand successes of our history and the painful defeats of our recent past. In our absorption with international one-upmanship, the accent has been on the defeats, there has been a busy measuring of missile ranges and a comparing of scientists per capita with our rival across the globe. While some have sought reassurance in our own scientific and military accomplishments, most articulate people have become deeply concerned with seeking the cause and solution of our present dilemma.

Before we can find out what we must become, we must understand what we are. One clue to the values really meaningful to Americans lies in the answers to two very personal questions: "What did we want to be when we were young?" and "What are our hopes for our children?" Accordingly, a nation-wide cross-section was asked their childhood ambition.

Not surprisingly, women's answers clustered around nursing, teaching, and the status that most of them later achieved: that of wife and mother. But the answers of men were quite revealing. When we subtract the childhood fantasy-heroes—the uniformed brigade of firemen, policemen, sailors, cowboys, and gentlemen of the rails—the choice of 14 per cent—what do we have left? The greatest concentration is among the professional categories, named by 18 per cent. Medical men, with a vote of 6 per cent, win hands down, and engineers come in second with 4 per cent. (In those days, the word "scientist" was often prefaced by the word "mad," and only 1 per cent aspired to that label.) Our culture heroes, then, lay in the professional world, and the well-paid doctor was the giant among them. On the other hand, the man whose brains run the businesses of our so-called business culture was a hero to only 4 per cent of the young, while the artisan, the man who makes creative use of his *hands*, attracted nearly twice as many—7 per cent. The arts—and this category includes writers of all kinds—roused a mere 3 per cent to dreams. (Three times as many women as men had wanted to enter the arts; apparently it was then "legitimate" for a woman, but not a man, to plan on becoming an artist or performer in our society.) Nor did most young boys lie awake at night dreaming of golden crowds cheering the ultimate home run; only 3 per cent wanted to be athletes. Nor of religious congregations to be led, the ambition of just 2 per cent. Perhaps the most telling statistic of all is one which does not appear in the table—it is the figure for those aspiring to enter politics, which was so small that it ended up in the "Other" category. Including a few "I wanted to be President" responses, less than one-half of 1 per cent of the men interviewed reported that they had wanted to seek a career in any form of government. The conclusion is clear: as a target of boyhood aspiration in this country, the political life, by definition essential to the operation of a successful democracy, simply does not exist.

Certain objections could be raised to this list of ambitions and to drawing from it a picture of America's value scheme. These are children's fantasies, it can be said, not the realistic judgments of adults. Let us then look at the answers to another question, which was presented to a matched cross section in two versions. The first version asked: "Here is a list of occupations. If you had a son, which one of these occupations would you like to see him enter?" In the second version the money factor was taken out of the equation, so that the occupations' intrinsic desirability could be judged. This sentence was included: "Let's assume that they all pay the same money."

	Money not mentioned	Same money
Medicine	27%	25%
Business	24	19
Science	22	23
Law	8	11
Teaching	8	12
Politics	2	2
None of these	4	2
Express no opinion	5	6

Medicine again topped the list, with or without the money qualification. Other occupations showed some interesting variations. Science, in third place when money was not mentioned, moved up to second place when it was. Business, on the other hand, dropped from second to third place when pay was equalized. Most significant, both law and teaching go up. The rise for teaching, from 8 to 12 per cent, may not cause immediate cheers in the educational community, but it should, for it could mean a 50 per cent rise in the number of teachers teaching today.

SEVERAL things seem clear from these figures: the applications of science, the building and making of things, have stirred the American imagination, but the theoretical roots of such activities have not. Our recent scare has caused us to put a new high value on the category "scientist," but has caused little questioning of the whole technological bent of our civilization, and no general re-evaluation of the intellectual and artistic life and the men of talent and learning who lead it. Perhaps gravest of all is our attitude toward the political calling. Untouched by financial considerations, low in the yesterdays and todays of public esteem, the men who must save us from world collapse come from a profession that has no place in our gallery of ambitions, and which most citizens would shrink from seeing their sons enter. It is a finding whose significance is obvious, and ominous. Our scientists, responding to the proddings of their government, have found a way to destroy the civilization we know. Men in politics must find a way to prevent our doing so.

—ELMO ROPER.

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LETTERS TO THE EDITOR

FURTHER SPUTTERING

FURTHER SPUTTERING re "spittin'." (Ira Wallach's letter concerning "spittin' image" [*SR* Aug. 22].)

Wallach bases his contention on an obsolescent meaning of "spit" as "likeness."

Wasn't O. O. McIntyre more logical when he attributed "spit 'n' image" to a corruption of "spirit and image"?

JEROME F. SALNY.

Morristown, N. J.

"A" FOR JARGON

IN HIS ARTICLE on the current debate on education [*SR* Sept. 12], George L. Fersh says that there has been "no orderly illumination of fundamental issues," and that much of the discussion has been a waste of time.

He concludes that, "The immediate aftermath has been the buttressing of negativism among the constant opponents of public education, the creation of rationalization outlets for those whose support for education rests on borderline priorities, and the multiplication of indecision [sic] among harried educators."

As a former school-board member, it occurs to me that one reason why there has been "no orderly illumination of fundamental issues" is that so many educators persist in speaking and writing in this fashion. I should think that professional people who depend so much on public acceptance of their ideas would take great pains to avoid the use of such incomprehensible jargon.

EDGAR B. NIXON.

Rhinebeck, N. Y.

REFRESHING

IT WAS REFRESHING to read "Today's Lost Generation" [*SR* Sept. 12], Clifton Fadiman's quietly authoritative exposition of the basic issues which must be faced if we are to breathe new life into our faltering school system.

For my own part, I left college in my junior year when I realized that I was almost as far from the possession of a basic liberal education as I had been when I entered the ninth grade.

I would hesitate to point the finger of blame at the system if it were not for the fact that many of my contemporaries have experienced the same realization; although the majority of them remained in school.

We consider ourselves fortunate, however, in comparison with others of our generation who are blithely accepting their adult responsibilities secure in the assumption that they have received the best possible preparation. We may be able to help ourselves but what is to be done for them?

DENIS LAMB.

Cleveland, O.

THINGS HAVEN'T CHANGED

MR. FADIMAN, in his zeal for basics, forgets to keep his eye on the ball. In the typical high school today he could have exactly the same course of study he pursued in 1920.

If he complains that today he would have the too-easy option of a simpler vocational course, remind him that his contemporaries had the option, which well over half of them exercised, of rejecting the high school in toto.

Why should their choice of no school rather than basic education be considered less calamitous than the choice of a comparable segment of today's youth of adjustment or vocational schooling rather than basic education?

DONALD W. ROBINSON.

San Francisco, Calif.

THROUGH HISTORY WITH J. WESLEY SMITH

"Take him first—he was our public relations man."

GET A JOB

PERHAPS IF Mr. Fadiman's early education background, of which he is so proud, had been broadened, he would be less inclined to place responsibility for the "lost" generation on the educators.

Mankind has acquired a few minor disturbances, such as hydrogen bombs, television, and cold wars, in the past forty years.

If the critics who blame education for all our ills *really* wanted to *help*, they'd become teachers. Nothing like teaching to convert a critic into a useful member of society.

JOHN A. WALL.

Tucson, Ariz.

REQUIRED READING

CLIFTON FADIMAN reveals his modest genius in a completely humane, grass-roots approach. I certainly should like to see it become required reading among some in my generation who are running confusedly into pseudo-Bohemianism, replete with manicured beards, manufactured neuroses, and most importantly, shallow thinking, sometimes disguised as nihilism. I feel strong attachment, however, to the learned rebel; he, at least, has a receptive, curious mind, and is not bent completely on self-destruction. I doubt that Mr. Fadiman would get much of a reception at the Coexistence Bagel Shop; the weekenders from Berkeley would demand a sophist telling them that Dylan Thomas wasn't really masochistic, he just happened to love the taste of alcohol.

Yes, bring back basic education, where "I could erect any intellectual structure I fancied." There is much, very much, to rebel against in contemporary society, but those with whom I wish to express my disagreement will have read more than one pocket Sartre or Camus. They'll at least know *how* to compose a grammatically correct and coherent sentence.

RONALD WALKER.

Warwick, Va.

A HOUSE AWAY FROM HOME

UNDER "What's New in Education" [*SR* Sept. 12], you termed the Fairfield, Conn., plan of breaking a high school down into "houses" an "innovation." While the idea is a good one, it is by no means an innovation. For many years, Brookline High School in the town of Brookline, Mass., has divided its student body into separate houses, each having a "housemaster." As a student there fifteen years ago, I had the administrative benefits of a large school with its gym, library, and other facilities. I also can remember being a member of Roberts House, and trying to live up to our House motto of "Intra Bonus, Melior Exi." Rah!

LEN SINGER.

Gainesville, Fla.

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MUSIC TO MY EARS

Dancers from Osaka

POSSIBLY if one came upon the Takarazuka Dance Theatre in its native lair, not far from Osaka, it would seem a quaint example of intermingled cultural influences, in defiance of Kipling's "East Is East, West Is West" dictum. As currently being seen in the Metropolitan Opera House, the company and program leave one with a nagging feeling that, perhaps, Kipling was right after all. Certainly the performance suggested that the widespread fallout from our exports of popular culture may be as pervasive, if not as poisonous, as those of the nuclear variety.

What was good about this program of the Takarazuka company was unquestionably the native element—the attractive girls (who play male as well as female roles), some of the varicolored costuming, and a scattering of the dancers, particularly those with masks. What was commonplace (not to say bad) were the elements assimilated from Western revues and musical comedies, operettas, and movies. The blame if largely, is not wholly, American (let us not forget there were English Tiller Girls before there were Rockettes). Our continental shoulders are big enough to bear the brunt of it, but there is enough to go around the international circle from "Chu Chin Chow" to "East Is West" and back again.

In its attractive aspects, the Takarazuka ensemble (especially its senior member, Otomoe Amatsu, the fifty-four-year-old dancing star who has spent forty years with the company) gave us most when truest to itself. These moments came in the episodes entitled "Masked Dance at Celestial Cave," "Lullaby," "Jingle Horse," and, most of all, "Snow in Winter." Here there were some blended elements of delicacy and strength we have known to respect in other forms of Japanese art. "Snow in Winter" was especially engaging for the impersonation of a wounded heron by Otomoe Amatsu (whose stage name, meaning a heavenly girl, is obviously the Japanese equivalent for Marilyn Monroe). In an Eastern parallel to the "Dying Swan" of Fokine-Pavlova-Ulanova fame, she demonstrated eloquent bodily discipline and a poignant projection of dramatic truth. But the thirty-odd maidens who fluttered about her in the guise of snowflakes were mostly superfluous.

This, and the other vignettes of quality, were overbalanced (in number and length) by the other kind: one titled "Beauty and the Bandit," in which a mischievous miscreant in pursuit of a geisha cried out, "Hey baby, let's have a ball!"; another, entitled "Mortar Drum Dance," wasted lively sound effects and elaborate costuming on crisscrossing evolutions not much related to dance Perhaps the best planning was encountered in the item titled "Baseball" each time a girl took a vocal solo at the microphone, the supporting ensemble waved bats and made umpirecal gestures in a grouping of nine.

Perhaps the choice of repertory (from a much more extensive range) bore unfortunately on things the importing impresario deemed "commercial" for an American audience. The constant offset to this charitable view came out of the orchestra pit, where a hopeless mélange of musical comedy and operetta clichés put a varnish of tonal "sophistication" on one number after another. Even in "Snow in Winter," which was possessed of some artistic interest, the musical element mixed Lisztian elaboration with the kind of "agitato" associated with silent films. If this is an example of the Western influence in Japan, perhaps the blame, historically, belongs to Admiral Matthew C. Perry for "opening up" the East in 1853. —IRVING KOLODIN.

A Song Stricken from the Records

By Howard Moss

DEAR fairy Godmother, hold back
Your magic transformation;
I see a coming cul-de-sac
In rising above my station.
I know my clothes are awful, my
Room a mess, but then,
At least I'm not surrounded by
Secret service men.
I fear the Prince's hunting lodge,
I fear my dear, his mother;
Frankly, I hate the whole hodgepodge,
And the infernal bother.

No Prince falls short of the ideal
Except on close inspection,
And royal houses, once they're real,
Reveal some imperfection:
The widest moat, so crystal clear
Today, becomes tomorrow
A muddy ditch with scummed veneer,
Incredibly more narrow.
I'd be, should you invoke your wand,
More sinned against than sinning,
And sadder at the happy end
Than at the sad beginning.

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SR GOES TO THE MOVIES

D for Effort

HARRY BELAFONTE'S independent film-making company, Harbel Productions, has bitten off more than it can chew comfortably with its first effort, "**Odds Against Tomorrow.**" It is a crime story that tries to be more than a crime story: that is, the three men who try to pull off a bank robbery are studied in greater character detail than is usual for the form, and there is also the injection of a racial problem into an otherwise fairly standard melodrama. The attempt to avoid clichés is certainly praiseworthy, but the result is neither satisfactory thriller, nor a serious movie. In a roundabout way the point is made that people are brothers under the skin, regardless of color, but this is hardly a breath-taking idea these days, even in movies, and I, for one, am willing to admit the truth of the idea and go on to other things, in spite of certain die-hards in Little Rock, Ark.

Mr. Belafonte, I am sure, has other ideas, too. He is an intelligent, talented actor and singer who is probably interested in broadening the kind of roles Negro artists can handle in films and theatre and he, as his own employee, has probably come off best in "Odds Against Tomorrow." As a night-club entertainer addicted to heavy gambling he develops some sympathy when he becomes enmeshed in a plan to rob an upstate New York bank, a seeming push-over, but a good deal less sympathetic are the former cop played by Ed Begley and a bitter marginal fellow, an ex-convict (Robert Ryan). The latter two are sour, depressed types, and the ex-convict played by Mr. Ryan also happens to hate Negroes. Naturally he and Belafonte are soon tangling, entirely unwilling accomplices in an operation no one has any love for.

The bank robbery comes to disaster, for all its careful planning, and all three meet a dreadful fate. Robert Wise, the producer and director, has adopted a documentary approach to tell the story, but real as the backgrounds appear there seems no telling point to be made, and the prevailing tone is one of dullness. Contributing to the general air of gloom are Shelley Winters and Gloria Grahame as the drab women in the ex-convict's life. Crime and prejudice not only don't pay in this story; they seem, on the whole, rather boring.

* * *

Francois Truffaut is another former French movie critic who has turned to directing and while his film "**The 405 Blows**" has been praised in its country of origin, it hardly seems as impressive as "The Lovers" and "The Cousins," made by two others of "the new wave" of French directors. His approach seems to be a mixture of the documentary and the candid, as he carefully follows a twelve-year-old delinquent in a series of minor catastrophes at home, school, and an institution for troublesome boys. The boy, played affectingly by Jean-Pierre Leaud, is the victim of insufficient love on the part of his mother and foster-father, and he becomes involved in pranks, truancy, and an abortive attempt at robbery. The photography is of that grainy kind that, I think, is supposed to be artistic, and the whole dramatic approach is rather off-hand, with facts about the boy revealed in the end that might better have been mentioned earlier. I suspect that M. Truffaut wasn't able to fully decide whether he was telling a dramatic story or making a serious psychological and social study of a typical delinquent, and by thus falling between two stools he has vitiated the emotional response of his audience. The boy is touching, but the sociology, grim though it is, seems superficial.

* * *

An English war film "**Yesterday's Enemy**" appears to be a low-budget follow-up to "The Bridge on the River Kwai," and serious, if not downright philosophical, as it tries to be about war in Burma it comes out a hash of platitudes set in a studio jungle, with all the harsh, tropical bird cries one could ask for on the sound track. "My concern is the living," says a stiff-upper-lip British officer in the style of a Sid Caesar parody of English movies, "not the dead." Similar lines abound as one after another a cut-off party of British troops attempts to establish contact with the main force and warn of an impending Japanese operation. Everyone takes time out from shooting or being shot to utter or mutter a platitude and then dies. At the end the jungle is peaceful (because everyone is dead) and there are no more bird cries. —HOLLIS ALPERT.

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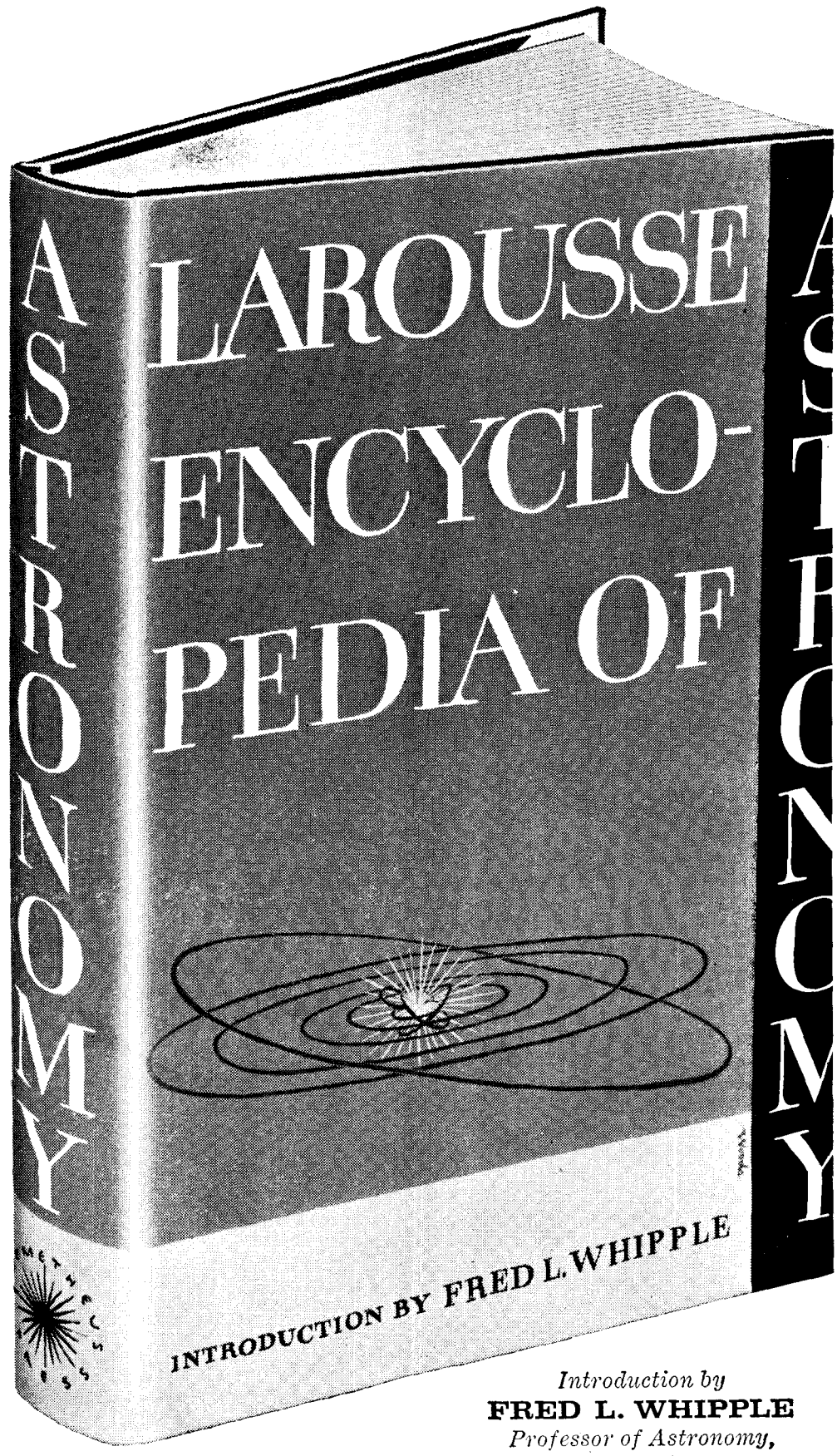

Introduction by
FRED L. WHIPPLE
Professor of Astronomy,
Harvard University

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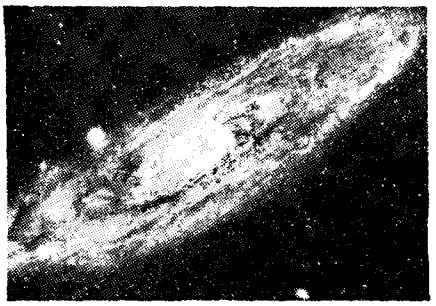

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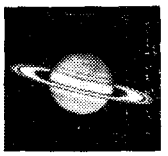

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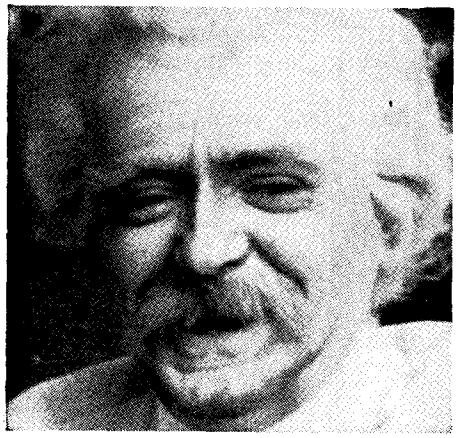

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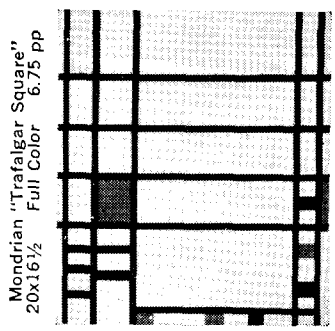

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BROADWAY POSTSCRIPT

Benedick I and Beatrice IV

IN London four years ago, Sir John Gielgud's third revival of **"Much Ado About Nothing,"** impressed many of us as the finest production of Shakespearean comedy likely to be seen in our time. Sir John as Benedick and Dame Peggy Ashcroft, who played Beatrice, generated imaginative merriment at its mercurial best. There was that rare and delightful trueness that is created when two perfectly matched performers work together freely within a circumscribed area of self-discipline. The joy, style, and grace of these two infected the whole cast and made the audience perfectly willing to accept the absurdities of a far-fetched plot.

Now, with some reluctance Sir John has let himself be persuaded to attempt a fourth revival of the play for American audiences. Again, with Margaret Leighton making a fourth Beatrice, we can see the expertness of his producing hand and his incomparable comic technique.

The comedy is danced and paraded in an elegant Renaissance garden. At the start, Miss Leighton's Beatrice appears more tense and less merry than Miss Ashcroft's did. But this is Miss Leighton's style, and it has the virtue of suggesting an angular old maid whose petulance is the symptom of inner frustration. Unfortunately, her early quips are directed at no one and come out as ineffectual asides. It is only with Benedick's appearance that her previously peevish remarks find a specific target. Gielgud helps her further by supplying reactions that make her deliveries seem twice as telling. For instance, in the masked-ball scene, when she pretends she doesn't know she is dancing with Benedick and insults him in the third person, he allows one of her thrusts to jolt him into momentarily dropping his mask. A little later, Miss Leighton gets fun out of her embarrassment when she must refuse Don Pedro's offer to be her husband, with "No, my Lord, unless I can have another for working-days." Yet she cannot climb back quickly enough to the poise she needs to make the "a star danced" line sound like anything more than an astrological explanation.

Sir John's opening-night performance was also uneven, although the shape of his production and his own talent kept emerging to banish the disappointment one feels when a great actor occasionally lapses into mere competence. He adds a nice touch in the scene where his friends are purposely allowing Benedick to overhear them in order to make him believe he is loved by Beatrice. At the statement that the lady is so desperate she may do an outrage to herself, Gielgud inserts a loud exclamation of disbelief so that the final words of the speech, ("It is very true") appear to be in direct response to the supposedly concealed Benedick.

Happily, too, Sir John lives up to expectations with his famous interpretation of Beatrice's invitation to dinner as a sign of her hidden passion for him. He understands that the audience relishes watching a sensible man deliberately deceive himself; the balance between his logical caution and his illogical passion teeters hilariously as he says, " 'Against my will I am sent to invite you into dinner.' There's a double meaning in that."

Once Beatrice has been given the assurance of Benedick's love, Miss Leighton's performance becomes more delightful. Her enthusiastic "Benedick, love on" creates a vision of pleasurable marital dominance for Beatrice. And the shearing of her Samson is illustrated beautifully by Sir John, who first amuses us by shaving his beard, then compounds the fun by appearing in a foppish sunflower hat, and finally exits with a humorously snobbish delivery no other actor could do as well. Here is proof of Gielgud's greatness. He doesn't merely play his part, he eats it up, every morsel.

When in the church scene the two disclose their love to each other, Miss Leighton demonstrates her marvelous talent for speaking through tears. In response to Benedick's request for a task to prove his love, she says with the utmost seriousness, "Kill . . . Claudio." And Gielgud allows this bitter line to have its effect for just an instant before he gets a laugh by drawing back and making a gesture with his hand.

The play's last act turns into opera, which is indeed what the huge proscenium opening and deep auditorium of the Lunt-Fontanne theatre is best suited for. Part of it is gorgeous processions in costumes that make everyone look like exotic birds, and some of it is the humorous antics of Dogberry and Verges. George Rose, who at thirty-nine has already established himself as England's best character actor, gives us an unstoppably

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confident Dogberry with the dryly humorous characteristics of a small-town English official. Dressed like an illustration from "Alice in Wonderland," Mr. Rose provides a madly funny minute when he is butted in the stomach by a prisoner incensed at the indignity of being caught by such a fool. Here he topples on top of the frail old Verges and nearly asphyxiates him.

The final scene is replete with joy and celebration and topped by the moment when Beatrice and Benedick both hold in their hands the absurd love poems written by each another. Here Sir John, without lifting his eyes from the doggerel he peruses with such amusement, holds out one hand vaguely in her direction and says with feigned resignation, "Well, I will have thee."

AND for all of its faults the audience will have this production, and be lucky to get it. Yet these faults must be listed. First, there is the miscasting of many of the supporting roles beginning with Michael MacLiammoir, who gives us a strangely oily Don Pedro, much more wicked than Hurd Hatfield, who plays his evil brother with an inexplicable sense of poetic exaltation. Barrie Ingham stresses all the wrong words in his portrayal of Claudio and his jumping from awkwardness in one scene to sophistication in another leaves no sense of character. Jean Marsh's Hero is pretty but uninteresting and she and Beatrice, who are supposed to be inseparable friends, seem scarcely to have met. Betsy von Furstenberg's Margaret is so blithe that we cannot believe she has been touched by the assignation that caused all the fuss in the first place. She apparently believes the title.

A second drawback is the loss of intimacy that comes from playing in a theatre so designed and decorated that the theatregoer not only feels twice as remote from the stage as he actually is, but also for some curious reason feels a remoteness from other members of the audience. This puts a terrible burden on the players for we must all work to stay in the same building with any action that is not eye-filling spectacle.

And finally we must realize that Sir John himself has had to fight not just these things, but weariness with a role he has played too many times. This he does admirably, and what remains is high-level performing and a degree of elegance and warm humor seldom found in contemporary Shakespearean productions. —HENRY HEWES

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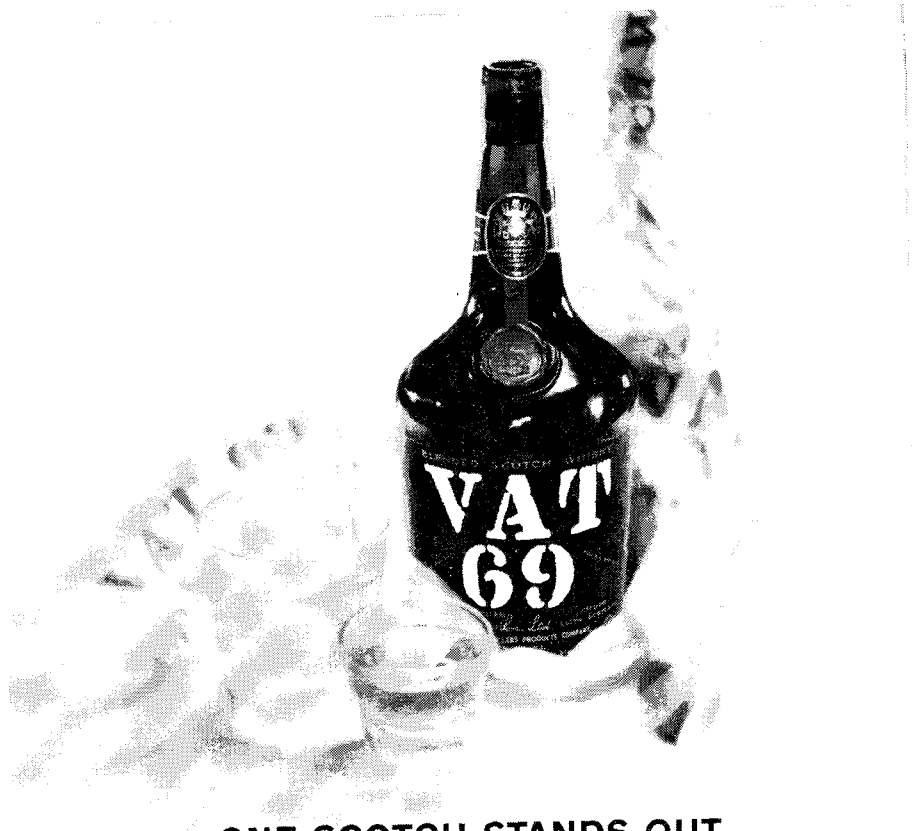

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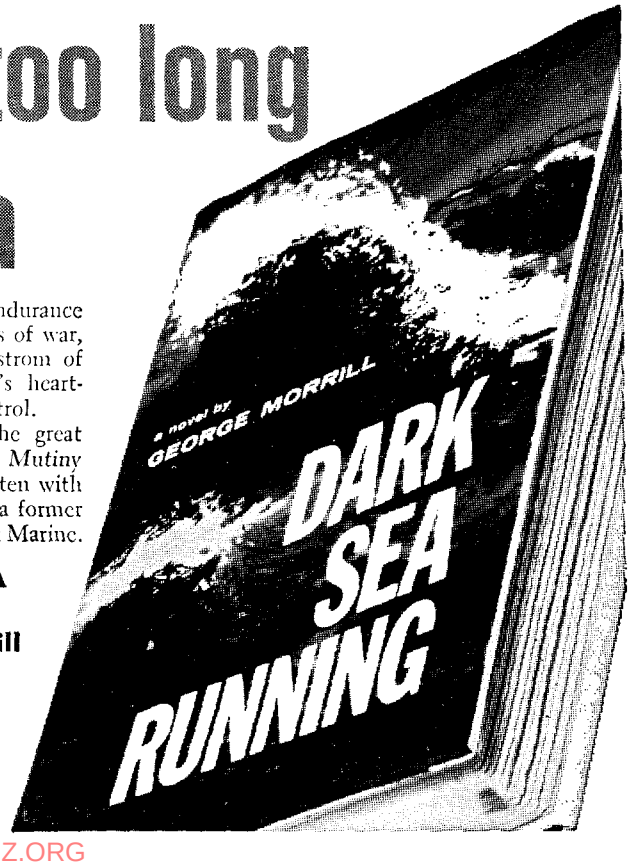

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BOOKED FOR TRAVEL

Paradise in Limbo

WHILE HAWAII buzzed with the excitement of statehood, with which these islands were officially blessed on August 21st, the prime topic of speculation this summer has been the prospect of imminent tourist ruination. The *kamaainas*, or longtime residents, are viewing the hordes of tourists spilling off the airplanes and the Matson liners with all the pleasant anticipation of a farmer watching an advancing cloud of seven-year locusts.

At their *lanai* parties, by the flickering torchlight, the local residents have buzzed loud and long this summer over the advent of the jets, chain-hotel operators, and an unprecedented wave of visitors, all of whom seemed to have descended upon Hawaii almost simultaneously with statehood. The strip of Waikiki just above the Surfrider Hotel has broken out in a rash of ugly boardwalk eyesores. The narrow beach itself, especially on midsummer Sundays, often has seemed as crowded as Coney Island on a sunny Fourth of July. Accidents mounted in the crowded surf. Hit-and-run surfboarders were proving the scourge of the sea, and even that old Hawaii hand, Duke Kahanamoku, the famed Olympic swimmer of other days, took six stitches on his cheek bone from a flying surfboard that hit him while he steered an outrigger canoe. "Danger at the Beach" the local papers shrieked, and the call went out for better traffic control, establishment of a buoy system, expansion of surfboarding areas by blasting out coral, the addition of more lifeguards, walkie-talkie sets, and flat-bottomed dories for lifeguards.

Each passing statesman had his say, and not the least of them was that elder savant, Arthur Godfrey, who found the beachboys "insubordinate," and the pineapple not nearly so tasty as it had seemed to him in other years. Visitors returning here after an absence of a few years have been startled to find tall buildings jarring the skyline view of Diamond Head. And I must confess there wasn't a day when I walked among the nodding tree ferns and the banana fronds of the Halekulani, or had lunch under the shade of its gnarled old hau tree, with the doves bouncing after the bread crumbs under foot, that I failed to reflect wistfully on the approaching execution of this most Hawaiian of all hotels. Much of Honolulu's beachfront land is owned by Hawaii's big estates and let out on lease. The Halekulani's lease expires in three years, and the new rates levied by the land-holding estates can only be met by a skyscraping hotel. The Kimball Brothers, who own the Halekulani, a comfortable expanse of tropical cottages, say simply, "One can no longer operate a public park." And so they will surrender these soft and pleasant acres to the wreckers and to the builders and take themselves off to the isle of Kauai, where things are still quiet.

A vast expansion plan has been announced by the Sheraton Corporation, which recently bought four of Hawaii's most famous hotels from the Matson Navigation Company, the steamship operators who ply Pacific routes. To make the land pay Sheraton will plant new shops, new parking garages, new hotels, restaurants, soda bars, and cocktail lounges. They have tightened the strings elsewhere in a way that has not exactly endeared them to Hawaiian residents, who are inclined to view them as tight-fisted Yankee traders rather than hotel operators. It is no secret that Sheraton has bought and then sold at profit no fewer than thirty hotels since 1945.

ON WAIKIKI Beach the reservation problem at Sheraton's lovely Royal Hawaiian has been stretching many a visitors' nerve. Stories bandy about the beach: the prominent family from Texas who had booked a large Royal cottage last October, invited their friends, arrived with two children and a nurse only to find the premises occupied by the new Sheraton major domo who proved unmovable; the lady who was charged thirty-five cents extra for ketchup; a principal officer in Diner's Club with which Sheraton is affiliated, who waited for two hours before getting a room; the abolishment of free parking at the Sheraton's hotel lots. For another thing they have abolished the friendly rate for Outer-island residents coming to Honolulu for a day of business or shopping. Nor did Sheraton endear itself on the local scene when it peremptorily offered to shift the incumbent Matson vice-president, Edwin K. Hastings, former resident manager of the Waldorf Astoria, to its hotel in Philadelphia. Hastings quit, and the local press broke out with protesting editorials. One member of Sheraton's board of directors has since implied that Hastings, as a Matson vice-president in Hawaii, was in reality an agent seeking to deliver the hotels to Hilton.

Strive as it might, Waikiki was far from ready for the onslaught of the jets. After a tour of Puerto Rico with Governor Quinn, whom he had helped elect, a famous island disc jockey named Hal Lewis, who broadcasts under the name of J. Akuhead Pupule, was full of grand ideas. He thought Hawaii needed more entertainment along San Juan lines—land of the big bands, big floorshows, and clicking chips in the gaming halls. There was even a notion afield that Sheraton was planning to bring in Mainland talent to pep up its entertainment program. To old Hawaii hands who felt Hawaii must stay Hawaiian at all costs, these ideas indeed seemed *pupule*, which is Hawaiian for crazy.

IT WAS against this background of changing ownerships, advancing commercialism, and overcrowded hotels that the jet age came to Hawaii late this summer. Pan American announced its scheduled flight time to the Mainland at four hours and five minutes, just about half of the time previously required by the fastest piston planes. The service started slowly and at an hour that was singularly inopportune. The first jet flights for the coast left Honolulu's International Airport at 12:45 A.M., and true enough, while they would ferry the passenger into California in time to start an early working day or catch an onward flight, he would have to be a person of immense stamina. And if he chose to go straight to bed upon arrival in California, chances are his hotel room wouldn't be ready until the previous night's guest checked out, sometime after midday.

Still, by October 15th, Pan American will be offering a dazzling once-a-day jet service in both directions between Honolulu and San Francisco and Los Angeles, as well as twice-a-week service between Hawaii and Portland and Seattle. What with the Pan Am jets winging up from Tokyo (in about ten hours) this one airline alone would be bringing 10,000 additional seats into Hawaii every month. Still to be heard from was United Airlines, which begins its own jet service with DC-8s in January. Western Airlines and Hawaiian Airlines are both jockeying to be nominated as an additional carrier to operate between the Mainland and the palmy islands.

Yet it was certainly true that outside of Waikiki, little indeed had been done in Honolulu or its island of Oahu to make life appealing or even interesting for the chance visitor who might

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wander off the glamorous strip. Although heads-up car renters like Hertz brought in cute little rentable runabouts like its wicker-chair fringe-topped Fiat to the islands, few drive-yourself agencies suggested to tourists what beauties lay over the hills. One day we pointed our Pontiac up over the Pali, which is the historic pass in the mountains high above Honolulu, and headed down to the Windward side over the slope of Koolau Range. The view from the Pali was breathtaking with the golf course below and the sea beyond and the flat strip of the Marine Corps air station on the hook of land in the sunlit haze.

On the Pali ramparts I found a marker telling who built the road and when, but where was history's plaque telling of Kamehameha's battle up the hillside, pushing the enemy over the Pali, a story known to every schoolboy and loudly sung in Hawaiian song? And what of the story of the last Queen Liliuokalani who wrote the words of Aloha Oe, the tender ballad sung so often and so romantically here in the islands, while riding up this very pass? Where, for that matter, are the explanations of the graves of the Hawaiian kings that repose with such majesty in the Royal Mausoleum on a hillside above Honolulu?

Unguided, we gave the Pontiac its head and it took us north along the beachroad where seaside parks abound —I counted a half dozen on the way to Laie Bay—but rare is the tourist who ever finds them. Nestling against the dramatic hills at Kahana Bay is a lovely inn called the Crouching Lion, with a beach in front and the rocky buttes rising behind. The walls of the inn are two feet thick and were hand-hewn from the blue stone cliff, but cool is the air and restful the pose, and the menu is brimful of mahimahi, which is dolphin, and teriyaki, which is steak marinated in soy sauce, and a Korean concoction of bell peppers, carrots, soy, sesame, and beef. Just up the line there is equal tropical serenity at the place known as Pat's at Punaluu, where passion-fruit sherbert floats in a pineapple shell, banana fritters bubble in the batter, and an afternoon is as memorable as other idle hours spent dawdling over the lunch on the terrace at Capriccio's in Rome or, in more stable days, at the Floridita in Havana.

The image of Hawaii is the Polynesian girl in a garland of leis and ukeleles strumming in the moonlight, but the population is variously Japanese, Chinese, Filipino, Korean to mention a few, and true Hawaiians, who have become a minority. All of these races came to Hawaii, like the Polynesians themselves, bringing their own cultures, and their pageants, florid and colorful, are still staged with considerable pomp and few onlookers. Ancient rites otherwise visible only in Taiwan, in Hong Kong, or Japan are just everyday events here in the fiftieth state. Tourists may jam the trumped-up hotel luaus on the notion that they are about to enjoy pure Polynesian feasts, but their numbers are few indeed at the pageants staged by Hawaii's people.

All summer long the Japanese Buddhists have been holding their bon dances posturing in the ancient steps that date back 1,300 years. They would gather on the lawn in front of the strange angular Buddhist temples, and team after team, each dressed in similarly patterned kimonos, would join the step while up in a tower, a bandanna tied about his forehead, the drummer beat a giant drum to keep the beat. Flutes split the air with reedy tunes, strings of lanterns swayed in the summer breeze, and dance teams donned their straw hats trimmed with cherry blossoms. If it were not for the stand selling soda pop and flavored ices and the sight of a pint-sized, kimono-clad Nisei in a baseball cap it would truly have been a scene out of Japan. But where were the tourists?

One late August day the Chinese Buddhists gathered in Ala Moana Park just below Waikiki to hold the ceremony of the Dragon Boat Day to pacify the deities of the sea so that they would bless swimmers and ocean and air travelers. Two marvelous boats were built of brilliant colored paper—one a dragon breathing the fire of red cellophane, and the other a phoenix, bearing the figure of the goddess of mercy. Incense burned in red sand boxes and perfumed the air, gorgeous paper dresses, imported from Hong Kong, one for each deity, frolicked on a line, waiting for the fire. A priest in a mortarboard read endlessly from a red prayer book made of accordion pages. Gongs rang, Buddhists closed their hands together and prayed, and food for the souls of the departed waited under the palm trees and was occasionally sprinkled with tea and whiskey. Then the boats were paraded to the sea's edge and were set afire to send them to the world beyond. And bags of paper representing money were sent along, too, to keep the souls solvent in the hereafter. Then to light their way candles were set in decorated paper cups and set afloat at the sea's edge, eddying out among the larksome sailboats, the wheeling catamarans, on their purposeful mission to light the way of the departed ones. Some travelers had gathered for this event for it took place just alongside the yacht club and not very far from the outré tourist cantonment called Hawaiian Village, established by Henry J. Kaiser. But I couldn't help but wonder as I watched the black soot from the departed boats settle back to Hawaiian earth, how Dragon Boat Day, had it been held in Hong Kong or Singapore, might have been event enough to change cruise-boat schedules, or change a tourist's itinerary. Here in Hawaii you could hardly hear the news of it for the strumming of the strings, nor see it for the swishing of the ti leaf skirts. It was enough to make one reflect if the future of Hawaii wasn't in the hills behind Waikiki, in the neighbor islands beyond its shores, in the history of its natives and pageantry of its immigrants from the Pacific, who are its people.

—Horace Sutton

Surfing at Waikiki—Walkie-talkies? . . . flat-bottomed dories? . . . insubordination?

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TV AND RADIO

Comes the Revolution

ALBERT SALOMON, in his essay "The Tyranny of Progress," tells an amusing anecdote about "coffeehouse intellectuals" who dream giant dreams and fashion utopian blueprints. Two Viennese intellectuals were discussing a Russian revolution while sitting in a cafe in 1916. One intellectual was certain that the revolution would come: the other, a skeptic, asked: "Who will make the revolution? Mr. Trotsky, perhaps, of the Central Cafe?"

I was reminded of this story recently while listening to several of the tapes in the new radio series "The American Republic," produced by Joseph P. Lyford, of The Fund for the Republic, in cooperation with radio station WBAI-FM, in New York. Consistent with The Fund's basic communications philosophy of "clarifying fundamental questions of freedom and justice as they are affected by our highly industrial society," Mr. Lyford, in half-hour conversations with journalists and university professors, takes the long look at several "major institutions in contemporary American society"—democracy, the press and science, labor unions, politics, and foreign policy.

His guests are by no means mere "coffeehouse intellectuals," escaping into Bohemia, where talk is truth. They are sophisticates who know their "major institutions" by long, working experience or scholarly study. But they are men of ideas without immediate power or official responsibility — and therein lies the chief charm of the three programs in the series that I sampled. Invite an office-holder, a candidate for office, or an official representative of an organized interest group to a conversation on the air, and you inevitably get the particular organization line from that individual. The effect is usually stuffed-shirtism, evasion, rhetoric—anything but dialectics, for which there is a great need on radio and TV. The producer-host and the authorities on "The American Republic" series don't employ the dialectical method, but they're not offering or defending anything but their own convictions, and this fact, on the programs that I heard, makes for honest, informative, and radical (in the original meaning of the word, as going to the root of) conversation.

It also makes for what would seem to be intellectual utopianism. For example, Stuart Chase, the economist, on the first half of "The Corporation," suggests that a national planning commission, after the order of a small-town planning and zoning committee, ought to be set up by foundations or universities to study continuously the development of the big corporations and to recommend steps to contain their power within the national interest. Mr. Chase believes that corporation managers are becoming "generalists," according to the Harvard Business School pattern, and that they would sympathize with such long-range planning for corporations, and even accept modified wage and price controls. Penn Kimball and Joseph Kraft are the guests on "The Publisher and the Press." Mr. Kimball is professor of journalism at Columbia University, and Mr. Kraft is a foreign correspondent for *The Washington Post* and other publications.

They agree that the salvation of the moribund newspaper business lies in the eventual elevation to top management positions of the experienced reporter, in place of the heir of the family publishing property. Walter Millis, military historian, on the program "Foreign Policy and Survival," asserts that the assumption of cold or hot war between the U. S. and the Soviet Union is no longer a useful concept to apply to the problem of survival in a megaton missile age. He thinks that the whole mood of our foreign policy ought to be keyed to the avoidance of nuclear war, and that, as a consequence, a slow but steady peaceful reorganization of international relations would follow. Such proposals for reshaping corporations, newspapers and state departments may be extreme and far from realization at this time; but, on second thought, they may not be as utopian as they seem. Mr. Lyford and Mr. Millis declare that they are pessimists; but the pose of pessimism has always been a false front for the intellectual without power. He is the incurable optimist, else he would not forever be analyzing.

Other conversationalists on the series are Robert Hutchins, president of The Fund for the Republic; Gerard Piel, editor of *Scientific American* magazine; A. H. Raskin, labor editor of *The New York Times;* Stephen K. Bailey, professor of political science, Princeton University; and Theodore White, author and foreign correspondent. "The American Republic" meets the need in broadcasting for penetration-in-depth into big, contemporary issues. It ought certainly to be scheduled by all radio stations who care about the long picture and the public philosophy.

—ROBERT LEWIS SHAYON.

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KINGSLEY DOUBLE-CROSTIC NO. 1332

Reg. U. S. Patent Office

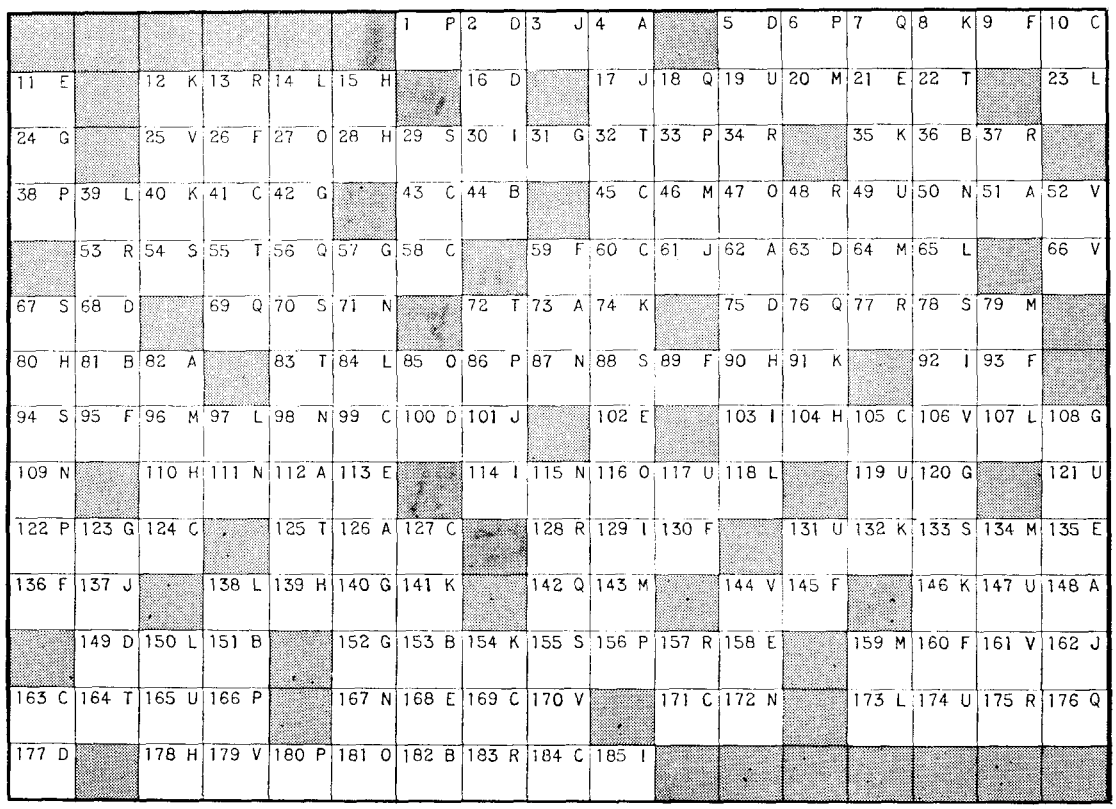
By Doris Nash Wortman

DEFINITIONS	WORDS
A. Sanctioned.	4 112 62 126 148 51 73 82
B. Great city one of whose boroughs is Stoke Newington.	182 153 81 151 44 36
C. Epithet for John Bunyan, from his early trade (2 wds.).	60 169 45 10 58 171 163 105 43 99 184
	41 124 127
D. Father of John the Baptist.	100 16 75 5 2 68 63 149 177
E. Supplements to books.	168 158 135 21 11 113 102
F. Performer of acts of kindness.	59 130 89 136 145 26 160 9 93 95
G. One of the great aims of the United Nations (3 wds.).	57 108 31 120 24 152 140 123 42
H. Possible flaw in a rosy scheme for which one must be watchful (2 wds.).	28 110 104 90 80 15 178 139
I. Amer. architect (Columbia Library, Vanderbilt Hall at Yale, etc.; 1841-1917).	103 185 30 114 129 92
J. Grafted in a special way.	17 162 137 3 101 61
K. The sort of "pool" that Will Rogers called the game of golf (comp.).	40 132 146 8 35 12 141 154 74 91

DEFINITIONS	WORDS
L. Unyoking the animals in order to make camp.	23 39 138 173 118 97 84 150 107 14 65
M. An officer of the custom house.	20 46 134 96 143 79 159 64
N. Embolden; cheer.	50 98 167 172 87 115 111 109 71
O. What Shakespeare's bees as "singing masons" built "of gold" (King Henry Fifth).	27 181 116 85 47
P. Device used in a mine as a substitute for a flight of steps.	86 6 38 156 33 180 1 122 166
Q. Arc of the horizon measured clockwise from a fixed point to vertical circle passing through center of some object.	18 56 142 7 69 176 76
R. Several declarations made in the Sermon on the Mount.	53 13 77 128 183 48 175 37 157 34
S. Mistaken.	67 29 78 54 155 88 94 133 70
T. Followed by "nature", philosophy's term for natural insight (2 wds.).	164 83 32 72 22 55 125
U. Places where justice is administered (2 wds.).	165 147 131 121 174 117 49 119 19
V. Brief writings formed as if to be inscribed on monuments.	170 25 144 161 179 106 66 52

DIRECTIONS

To solve this puzzle you must guess twenty-odd WORDS, the definitions of which are given in the column headed DEFINITIONS. Alongside each definition, there is a row of dashes—one for each letter in the required word. When you have guessed a word, write it on the dashes, and also write each letter in the correspondingly numbered square of the puzzle diagram. . . When the squares are all filled in, you will find that you have completed a quotation from some published work. If read up and down, the letters in the diagram have no meaning. . . Black squares indicate ends of words; if there is no black square at the right side of the diagram, the word carries over to the next line . . . When all the WORDS are filled in, their initial letters spell the name of the author and the title of the piece from which the quotation has been taken. Of great help to the solver are this acrostic feature and the relative shapes of words in the diagram as they develop. Authority for spellings and definitions is Webster's New International Dictionary, Second Edition.



Solution of last week's Double-Crostic will be found on page 13 of this issue.

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BELLES-LETTRES

Their Prose Is France's Pride

"Albert Camus and the Literature of Revolt," by John Cruickshank *(Oxford. 249 pp. $5.75) and* ***"Jean Giraudoux: His Life and Works," by Laurent LeSage*** *(Pennsylvania State University Press. 238 pp. $5), study the careers of two of France's most illustrious literary men. Henry Popkin, who has written many articles about contemporary European drama, is now a Fulbright lecturer on American literature in France.*

By Henry Popkin

TO READ these studies of Camus and Giraudoux is to be reminded that in France a literary man is, unlike his American counterpart, a public figure and an official national treasure. Also, he is not just a novelist or a dramatist, but truly a man of letters—novelist, dramatist, essayist, critic, interpreter of thought and of the arts. Both Camus and Giraudoux qualify on all these grounds.

Respectable as he may now seem, Camus did not become a French idol by being any sort of conventional good boy. He made his first impact as an essayist and popular philosopher, as discoverer and prophet of the absurdity of existence, and as exponent of systematic and categorical revolt. As Mr. Cruickshank recognizes, his real proficiency is in the novel, but he has always been powerfully drawn by the drama, and he has enjoyed the advantage of close collaboration with the leading figure of the present French theatre—Jean-Louis Barrault. Even if he has not yet made his mark in the drama, his government has already rewarded his achievement and his promise by putting him in charge of an experimental theatre.

Giraudoux was another writer whom one might not have expected to become his country's official pride. He was a milder iconoclast, a born dramatist who also wrote novels and essays, all in his characteristically graceful, loquacious manner. In his drama he directed his skepticism against various of our inheritances – mainly against ancient myths ("Electra," "Judith") but also against society ("The Madwoman of Chaillot") and marriage ("Duel of Angels"). He anticipated Camus by collaborating with Louis Jouvet, the leading theatrical figure of his day. This systematic skeptic whose plays succeeded in spite of their intellectuality was a devoted public servant and served during the war as a cabinet minister. When "The Madwoman of Chaillot" was performed posthumously, General de Gaulle provided official endorsement by attending the premiere. An approximate, if farfetched, American equivalent would have been for President Eisenhower to have attended the opening of "Long Day's Journey into Night." Beyond doubt, these things are ordered better in France.

—International News Photos.

Albert Camus—an official French national treasure.

LESS exuberantly written than Germaine Brée's recent exposition of Camus's literary practice, Mr. Cruickshank's volume painstakingly examines and evaluates Camus's arguments and techniques at every stage of his career. His thought, however, stands up better as a "destruction of facile assumptions" or as a substructure for fiction than as a coherent philosophical system. The accomplishment that really counts is his fiction, which improves as Camus gets beyond the facile destructiveness of his cold-blooded "anti-novel," "The Stranger," and achieves the greater complexity of "The Plague," "The Fall," and "The Exile and the Kingdom." Camus's mature art is designed to encompass complexities.

Giraudoux is the subject of a conventional biography, which incorporates summaries of his works and themes. Mr. LeSage ventures no startling judgments or intricate interpretations, but the opinions he offers are usually sound. A good test, I think, is his certainty that Giraudoux rejects the fanaticism of his Electra; other critics, recalling too well the Electra of the Greek dramatists, have refused to believe the evidence of their eyes. Observations of this sort indicate that if Mr. LeSage wanted to give closer scrutiny to Giraudoux's works, he would do well, but he does not care in this book to attempt more than a superficial examination.

EDITOR'S NOTES: It isn't really fair, of course, to hold a great writer's letters against him. After all, he presumably never wrote them for publication. Yet somebody has taken the trouble to publish them, and so it is difficult to refrain from judging them by the same critical standards as any other literary work. By these standards **"Letters to Louise"** (University of Pennsylvania, $3.50), Theodore Dreiser's letters to Louise Campbell, his friend and editor for many years, are almost entirely lacking in value. A large percentage of them are simply instructions to her about the typing and delivery of manuscripts—they might have been written by anybody. In the more personal letters we find ponderous political platitudes ("This war will prove to the rank and file that our multimillionaires are seeking to sell them out") and flat superficial descriptions ("Here I am at Daytona. Blew in here Saturday from St. Augustine. There's a charming place—historic and beautiful") alternating with attempts at humor which are almost embarrassingly coy ("I owes juice several apologies—").

From this historical point of view the value of the letters is only slightly greater. It is interesting to know that Dreiser wanted very much to win the Nobel Prize, that he rewrote his novels four or five times (what on earth could that first draft have been like?), that he depended on his editor to an extent unequaled even by Thomas Wolfe—for Maxwell Perkins merely cut Wolfe's novels, while Miss Campbell actually rewrote large sections of Dreiser's. All this is interesting, but to whom? To scholars perhaps, and to collectors of Dreiser minutiae, but surely not to anybody else.

Since Dreiser's death, the biographical and "critical" works about him have been piling up. The authoritative edition of his complete doodlings will no doubt appear shortly. Meanwhile, "Jennie Gerhardt" and "The Financier" are still out of print.

—JAMES YAFFE.

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REMINISCENCES

A Libertine Looks Back on Love

"The Memoirs of Casanova," translated by Arthur Machen; *Vol. I, "The Venetian Years" (Putnam. 729 pp. $5), Vol. II, "Paris and Prison" (Putnam. 714 pp. $5), evoke eighteenth-century European life in a sparkle of love affairs, picaresque adventure, social comedy, and earthy farce. Robert Halsband is the author of "Lady Mary Wortley Montagu."*

By Robert Halsband

"BY TURNS journalist, preacher, *abbé*, diplomatist, musician, alchemist, businessman and gambler": that is how a standard encyclopedia describes Giovanni Jacopo Casanova de Seingalt (1725-1798). Omitted is the role for which he is most notorious: that of amorist. However, near the end of his long life he achieved his most significant stature when, in an isolated castle in Bohemia, he wrote his memoirs for posterity.

It is astonishing that in his lonely and melancholy exile he could summon up remembrance of things past with such dramatic verve. Unlike Boswell, whose journals record the hot experience of life on the boil, he had to depend on remote recollections. (Perhaps that is why he frequently called in the aid of imagination.) Unlike Rousseau, who wrote his "Confessions" to justify himself, Casanova composed his memoirs simply to relive vicariously the pleasures of his fabulous life.

Although critics sometimes complain of their monotony, his adventures in love and lust have every kind of variety. Did he have many? One biographer has compiled statistics: in the forty years spanned by the "Memoirs" Casanova mentions 116 mistresses by name—which averages three a year. But these figures include his years of pre-puberty and exclude nameless casuals; and they disregard the Kinseyan statistic of frequency. (On occasion he rivals Frank Harris in boasting.) The little dramas of his love affairs are richly varied—in cast, décor, and action.

In the present two volumes, containing one-third of the entire "Memoirs," the longest love sequence is elaborated with the techniques of romantic fiction laid over a base of fact. Returning to Venice after an absence of three years, Casanova meets a lovely, innocent girl, falls in love with her, but when he wishes to marry her—an unusual step in his dedicated career of liberty—her father disapproves and forces her into a convent. When Casanova visits her there he is seen by another inmate, who intrigues a meeting. He falls in love with her, too, and after a voluptuous affair discovers she is mistress to the French Ambassador. This odd arrangement—for the two girls are lovers to each other as well—is resolved with such unexpected piquancy as to challenge any accusation of monotony.

Balancing the love affairs are scenes of picaresque adventure (the escape from the Leads, notably), social comedy, and earthy farce. These make the "Memoirs" a brilliant kaleidoscope of eighteenth-century European life. In these volumes Casanova travels in Italy, France, Germany, Austria, Switzerland, Corfu, and to Constantinople. (In later volumes he will reach England, Russia, and Spain.) And in the spirit and practice of eighteenth-century cosmopolitanism he finds himself at home throughout Europe. He converses with persons of every rank and profession—from the Pope and the Imperial family in Vienna down to vagrants and criminals. Even the span of history is broad, for although the "Memoirs" end in 1774, Casanova lived to see the French Revolution and its aftermath. As an aside he wonders whether the despotism of the people in France is less obnoxious than the despotism of a king.

In fact his asides, as he reflects on his adventurous life, provide a revealing double exposure of the rake in action and in retirement. Love, he says, is a feeling of curiosity grafted onto the instinct of procreation—a definition very different from his frequent raptures. His belief that self-love is the mainspring of man's actions and thoughts is a popular theory of his time; and he is such an apt disciple of La Rochefoucauld that he unknowingly paraphrases that master cynic. Would one think of looking to Casanova for wisdom? Yet his frequent maxims—"a man never argues well except when his purse is well filled"—show that he could put his wits to other uses than seduction.

So much for the enduring and endearing qualities of the "Memoirs": since their publication almost 150 years ago they have been praised by many critics, in our own day by Havelock Ellis and Edmund Wilson. What of the present translation? It was made by Arthur Machen in 1922 for the Casanova Society in London, and has been reissued at least three other times in subscription editions. This is the first trade edition at a popular price. At best it is an adequate translation; at worst it commits some curious gaucheries: "taking me apart, the curate told me . . ." is a sample. When the narrative spills ahead one forgets the translation, but when the pace slows, one is aware of its flat and clumsy tone.

A more fundamental weakness is that we have no complete or accurate text of the "Memoirs" (written originally in Italianate French). The story of its initial publication is too intricate to be told here. We know that Casanova's autograph manuscript was in the publishing firm of Brockhaus in Leipzig. Is it still there? And if so, why not a complete, accurate edition? In France at this moment two scholars are preparing an extensively annotated edition of the "Memoirs." If possible it should be based on the manuscript so that the gay Venetian libertine could be seen in his own full and authentic dress.

—*From the book.*

Casanova at work—in forty years, 116 mistresses: an average of three per year.

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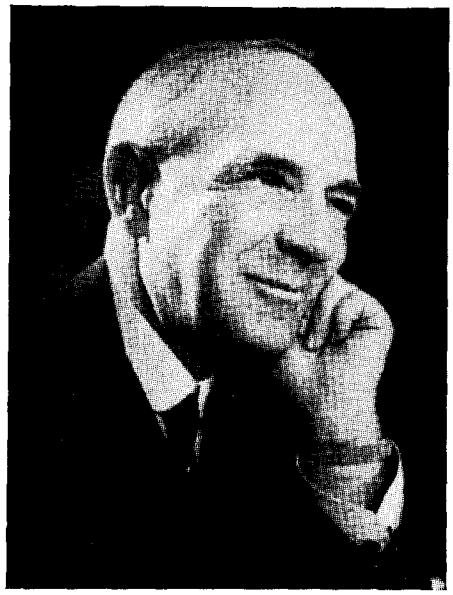
Fearless at the Feet of Freud

"Free Association: Memoirs of a Psychoanalyst," by Ernest Jones *(Basic Books, 264 pp. $5), shows Freud's right-hand man to have been, on the whole, singularly untroubled by the torments that nagged so many of his colleagues. A former fellow of the Center for Advanced Study in the Behavioral Sciences, where he wrote "Freud: The Mind of the Moralist," Philip Rieff is now associate professor at the University of California, Berkeley.*

By Philip Rieff



—From the book.

Ernest Jones, 1936—Danced to no tune.

IN THE history of the psychoanalytic movement from the Second World War to 1958 the dominant figure is that of Ernest Jones. His dominance was official; he was head of the movement, in personally approved succession to Freud, as no other analyst can ever be again. Even during Freud's own lifetime Jones was no ordinary disciple, vacillating between subservience and rebellion. He danced to no tune, perhaps because earlier in his career the desire to become first had drained away through an instructive sequence of professional success and failure. He made Freud an excellent organizational right hand, diplomatic and manly, with a capacity for sitting at Freud's feet without feeling small. That capacity never matured in Rank, Adler, Stekel, or Jung.

There is a danger in laying oneself open to new ideas: as original disciples, the first consumers of new ideas develop inordinant desires to produce their own. Unlike his ultimately rebellious colleagues, Jones never became that sort of producer, aspiring to go the master one better. It is appropriate that the book by which he will be remembered is the biography of Freud. For this crowning work of his life Jones put aside the writing of his own memoirs. Substantially, the eleven chapters now published were complete in 1914. But when Jones returned to them in 1957, after completing the biography of Freud, his time had become too short. He died in 1958, without being able to do more than retouch his self-portrait. He appears before us as a young Englishman in search of a moral science with which to heal the fresh wounds of unreason, from which, as we see in the anecdotal matter of this book, he considered even the scientific must suffer.

Ernest Jones portrays himself as a born medical man—and gay, hopeful immensely active. He had a creed, which made him more self-conscious of the variety of role he could assume as a physician than most of his colleagues. An old-fashioned rationalist, in psychoanalysis the young Jones found what he most needed: something to crown his rationalist belief with subtlety. Freudian doctrine permitted him to be medically active in an intellectual way and yet therapeutically practical at the same time. The gratitude to Freud which Ernest Jones felt, for opening up a branch of medicine fit to practise by a modern student of the mystery of human nature, is evident in these memoirs. From his student days Jones was a doctor who observed the personalities of his colleagues, and even their techniques, as if they were expressions of character. It was inevitable that this doctor should become a psychoanalyst. Jones reports the final shift in his medical career as a matter of course.

Packed with friendly observations of colleagues, this book is often surprisingly dull. Where his hostility is scarcely concealed—as, for example, towards Jung, Adler, Stekel, Rank, Ferenzci—Jones's insights are sharp. In hostility he psychologizes freely; in friendship—as, for example, towards Ward or his brother-in-law, Wilfrid Trotter—the psychologizing is perfunctory.

About himself Ernest Jones psychologizes almost not at all. It is not from his own bundle of nerves that Jones jumps to insight, but from the insularity of his self-esteem. From his earliest years Jones remembers himself as all tight and shipshape, ready to take a leading part in something. The manner of this memoir is informed by the nostalgia of an eminent old man satisfied with the course of his life, and gathering together its remote pleasures and pains into the final satisfaction of savoring them. To his satisfaction, the activity in which finally he took a leading part conformed to his view of what was needed by the world: a scientific movement that would help mankind learn how to behave more reasonably. That the psychoanalytic movement attracted so many unreasonable men is an irrationality with which Jones does not cope; he, at least, appears reasonable. Therefore, he can take for granted the character of his inner life, as if it somehow parallels his outward actions.

To readers less rooted in nineteenth-century rationalism, Jones's memoirs will read now and then a little smugly. Occasionally he lays some deep lines upon the surface of his self-portrait, more to darken in his professional capacity for penetrating facades rather than in genuine exploration of such universals in himself as father-tension or mother-love.

Neither Freud nor Jones wrote the kind of autobiographies that psychoanalysis would appear to encourage; Jones's memoirs have nothing of the inner case history about them. No psychoanalyst has yet written his life story in the improved psychoanalytic way. It is as if they have worn out their talents for self-revelation in listening to those of others. Perhaps they are merely following the rules of the professional game. An autobiography of authentic psychoanalytic penetration would violate Freud's strict canon against the analyst revealing himself. Being perfunctory, and largely about the surface of his life, Jones's "Free Associations" will not satisfy the interest of readers for whom autobiography at its best supplies some of the erotic satisfaction of openly prying at the underside of another life.

Because they mainly chronicle his career, the memoirs of Ernest Jones convey the tenacity of his ambition rather than the grip of his intellect. Too intelligent and eager to be serene, nevertheless Jones portrays himself as lacking that complexity of character which fascinated him about his Jewish colleagues. Perhaps it is this want of complexity, rather than any

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defensive reticence, that makes this autobiography, at its most interesting moments, less about the author himself than, with judicial calm, a series of final judgments upon his colleagues. Although psychoanalysis undoubtedly helped Jones to understand his colleagues, to understand all is not to forgive all; even at the end of his life Ernest Jones had not forgiven Jung for his intellectual backsliding.

England continues to produce great judges of character, most of them working in the form of the novel, while the remainder write biography. Perhaps too, with British judiciousness, Jones found himself alone too small a subject for full-scale treatment. To the pride of association that complemented his modest self-assurance we are indebted for the three volumes of his monumental "Life of Freud."

A Nazi Life-Sum of Subs and Lies

"Memoirs: Ten Years and Twenty Days," by Admiral Karl Doenitz *(World. 500 pp. $6), bleaches a dark blot on history with protestations that Hitler wanted war with neither Britain nor the U.S. (And, of course, the author himself was unaware of Nazi atrocities). As the* Chicago Tribune's *correspondent-in-chief for Central Europe, with headquarters in Berlin, Sigrid Schultz covered the beginning of the Second World War.*

By Sigrid Schultz

IN HIS "Memoirs: Ten Years and Twenty Days," Admiral Karl Doenitz seeks to prove that if Hitler had followed his advice and had waged all-out submarine warfare, from 1939 on, Germany could have won World War II. As the Fuehrer's last Naval Commander-in-Chief and his successor, the Admiral presents ample evidence to support his claim, though he admits that, in the long run, British and American planes sealed the doom of German U-Boats.

When in command of submarine operations, Doenitz asked Hitler for 300 submarines. He did not get them in the initial phase of the war. Nevertheless, the amount of shipping destroyed by the small "wolf packs" of subs—especially in American waters—is so staggering that he may well be right in his claim that 300 U-boats could have won control of the Atlantic for Germany.

As a treatise on submarine warfare, the Admiral's book will be of great interest to experts in this field. But, as "Memoirs" that are supposed to tell honestly of events he witnessed, his book is sadly marred by half-truths, distortions, and a number of outright lies of the endless variety that is dear to the hearts of those Germans who continue to parrot the Goebbels line.

—*From the book.*

Admiral Doenitz — The Goebbels line.

For instance, on the first and on the last page of the book Doenitz claims that Hitler did not want war with England. Hitler's prewar addresses to his high-ranking officers prove that this is utterly untrue. In August, 1939, he went so far as to brand anyone who tried to mediate between England and Germany as a "*Schweinehund,*" or "pigdog." Doenitz, who helped prepare the German war, had access to the text of the Fuehrer's addresses. He chose to ignore them and to forget about the vast amount of evidence that does not fit into his theory.

America fares no better than England at the hands of the Admiral. Attempting to show that Hitler did not want war with the United States either, he cites the Fuehrer's orders to the Navy not to attack American ships in 1940 and parts of 1941. Anyone who has studied the problems knows that Hitler did not want to arouse American public opinion, in the hope that Congress would refuse to pass the draft law and other measures. Thus America

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would have been totally unprepared for war whenever Hitler chose to strike.

Doenitz tries hard to pose as the man who did not know about Nazi atrocities. He acts as if he were unaware of the employment of slave labor worked to death by the Germans. Certainly he accepted the murder of close comrades in the Blood Purge of 1934 with revealing callousness. If he did not know of the sinister character of Himmler, why does he tell of hiding a pistol "with the safety catch off" under papers when Himmler called on him?

In the negotiations for Germany's surrender, Doenitz proved an able realist who served his country superbly. He used the free world's fear of Bolshevism as adroitly as the Germans did after 1918. Though the Hitler government was the one that invited the Russians to advance toward Central Europe and to help themselves to parts of Poland and Rumania, Doenitz blithely charged in 1945 that if the British and Americans did not make a separate peace with him, they would not be "fighting in the interests of their own people, but solely for the expansion of Bolshevism in Europe." This does not prevent him from hinting darkly: "Although I reject Communism . . . my actions in 1945 cannot and must not be taken as an indication of my attitude towards the question of how Germany should ultimately come to terms, politically speaking, with her Eastern and Western neighbors."

There is one question about German U-Boats that is of great interest to us now that the Russians have gone in for mass construction of submarines: how did the Russians get hold of the plans for Nazi Germany's newest submarines in 1945? The Admiral throws no light on this matter, despite its importance for the present.

Surveys

Continued from page 25

many "great issues" in Russian studies have scarcely been discussed—be they the extent to which the Russian past or the Soviet present are "unique"; the forms and significance of the impact of the regime on the individual; comparative studies in literature, intellectual history, or institutions between Russia and the West; or numerous other problems suggested in this book.

More than that, one might question the view that the cathedral of learning must rise, brick by brick, out of petty monographs (however meritorious). Even omitting the question whether in the politically vital domain there is enough time for the brick-by-brick approach, one should ask who is to provide the design and the mortar. Great works are not produced in pursuit of "filling gaps." And the teacher's function (to change the image) is scarcely that of a traffic cop directing the student searching for a thesis topic as if to a vacant parking space.

In this instance the shortcomings of the Russian field are common to American intellectual life. This is true of particulars (the orphan status of Soviet geography is but one phase of the scandalous neglect of geography in American education) as well as in broader terms. With all their virtues, "area studies" have produced few integrated, multidisciplinary insights. Historical and political studies have, on the whole, been more satisfactory than the subtler inquiries into culture and society—treacherous in their dynamics, doubly elusive in the Soviet case.

Those seeking new subjects to bite into or reassurance that excellent work in this field is both possible and needed, will find them here. I can think of no problems intellectually more challenging or politically more vital than to probe the unknown in our quest to understand the Soviet system and society, Russia's past—and perhaps its future.

III. Mid-'60s Strategy

By Thomas R. Phillips

IN SPITE of being a senior staff member of the Rand Corporation, a nonprofit research organization supported entirely by the Air Force, Bernard Brodie has demolished in his book many of the most sacredly-held and fought-for strategic ideas of the Air Force. Since these ideas are also embodied in national policies, he has brought these policies seriously into question. There is little left of massive retaliation when Dr. Brodie has completed his examination of it. The correlative failure, from overemphasis on massive retaliation, to provide protection for the deterrent force and for the public from an opponent's first strike is shown to have vitiated the value of deterrence and opened the way to defeat. Worst of all from the Air Force point of view, Dr. Brodie advocates that we develop a separate capability and "a new technology also for non-nuclear war."

"Strategy in the Missile Age" is the outstanding study of military problems and strategy from the point of view of national policy since the advent of nuclear weapons. Only two preceding books, Henry L. Kissinger's "Nuclear Weapons and Foreign Policy" and Robert Endicott Osgood's "Limited War," approach it in value. It will disillusion those Americans who have made a Maginot Line out of the Strategic Air Command and who think that it automatically will win a war for us, big or small.

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COMBINATIONS

Each of the apparent words below is made up of the first three letters of a one-word title of a short story followed by the final three letters of the author's last name. (No. 11, for example, is "Youth," by Conrad.) Helen V. A. Walters of Fayetteville, New York, asks you to identify the titles and to name the writers. Answers on page 44.

1. Flieck
2. Raiham
3. Powlty
4. Tobaki
5. Crance
6. Wasner
7. Blield
8. Harner
9. Carmee (Carmée)
10. Seeson
11. Yourad
12. Lanwis
13. Herert
14. Arayce
15. Uprkow
16. Quathy
17. Fooele
18. Marson
19. Baslly
20. Judard
21. Kerton

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It will shock them to learn how complicated the problems of SAC become when it must hit back after an opponent's first strike and find targets on empty airfields and missile installations from which the birds have flown.

Dr. Brodie's study is pointed to the middle Sixties when the opponent will have a long-range missile striking force with sufficient accuracy and numbers to destroy in one strike most of the retaliatory installations in the United States. He does not doubt this capability. He questions whether the survivors of such a strike, many or few, "in the midst of a land scarred and ruined beyond all present comprehension," should be "expected to show much concern for the further pursuit of political-military objectives."

After an opponent's first strike, the only target system left will be his cities. But retaliation on the cities with an inferior force will be answered with tenfold destruction of our own cities, since the enemy's force will be relatively intact while ours is decimated. The answer to this situation that Dr. Brodie recommends is to spend less on our own striking force and more on its protection. This is necessary, he believes, because American policy is not to strike first, and the deterrent, or retaliatory force, must be protected in underground installations, by dispersion, concealment, or mobility so that it can survive a first strike and hit back. Such a capacity, he believes, makes the deterrent real and credible. Much the same reasoning applies to protection for the population and this, Dr. Brodie believes, is also essential as a part of deterrence. There is not much use in saving a part of SAC if most of the people are dead.

"The chief problem of limited war today," Brodie writes, "is the problem of finding sanctions for keeping out of action, on a stable basis, just those existing instruments which from a strictly military point of view are far the most efficient." In other words, we should plan to fight limited wars with nonnuclear forces—but a nuclear capability in readiness is necessary to deter the opponent from the use of nuclear weapons in limited war.

The doctrine of deterring limited wars by the threat of massive retaliation at "places of our own choosing" comes off badly:

> The second basic principle of action for the United States [Brodie declares], is to provide a real and substantial capability for coping with limited and local aggression by local application of force. This is to avoid our finding ourselves some day in a dilemma where we must either accept defeat on a local issue of great importance, or else resort to a kind of force which may be intrinsically inappropriate and which may critically increase the risk of total war.

At another point he writes:

> Some areas which the Communists might attack are a good deal more accessible to their forces than to our own. There are basically two ways of responding to a problem of this sort. . . . One is to apply with determination the threat of massive retaliation to protect those areas; the other is quietly to decide that we cannot protect them by arms.

This is a prophetic statement of the United States' dilemma in Laos, if the Royal Laotian Government asks eventually for the protection of SEATO. The United States has no non-nuclear forces capable of saving Laos from aggression, direct or indirect, by the Communist North Vietnamese and Chinese forces. The SEATO umbrella was spread over Laos in 1954 by the late Secretary of State John Foster Dulles when he was under the illusion that the threat of massive retaliation was a protection. Brodie foresaw such a situation. He wrote:

> Another way [of miscalculation] . . . is the case where the potential aggressor disbelieves our general threat and is quite right in doing so; not because our leaders were deliberately bluffing at the time the policy was enunciated but rather because they failed at the time to think it through sufficiently to predict their own or their successors' response under crisis.

Why are such policy errors made? "It is an old story," Brodie explains, "that limiting vital information to a few highly placed persons who do not have time to think about it can prove an excessive price to pay for security." He notes that the "massive retaliation idea is being phased out," in words but "that developments in our military force structure through 1958 and 1959 were in the direction of increased rather than lessened dependence on massive retaliation."

Like most books that are the product of a great deal of thought, "Strategy in the Missile Age" requires attentive reading. It is worth it, both for the specialist and the citizen.

Criminal Record

MIZMAZE. *By Mary Fitt. British Book Centre.* $2.95. Thoroughly unpleasant British tycoon is bashed on head by croquet mallet in middle of privet labyrinth; Inspector Mallett (*sic*) takes over. Conventional.

HOT RED MONEY. *By Baynard Kendrick. Dodd, Mead.* $2.95. New York columnist (and Commie infiltrator) seeks source of beyond-curtain gold hoard; FBI also active; she-psychiatrist with "caponized eyes" present. Wonder-boy performance.

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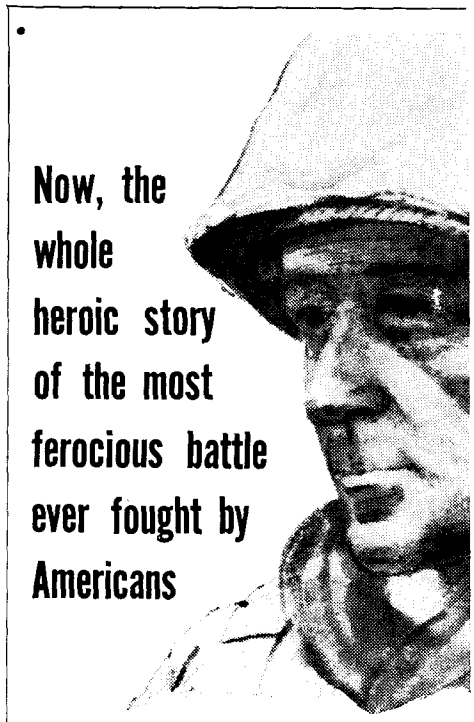

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Readers and Writers

(*Continued from page* 17)

attack the problem at its source. If we can somehow get rid of the tensions and reduce the fear of war, the creative and cultural climate is bound to be better.

"I try to do what I can, in a small way perhaps, as Chairman of the Soviet Peace Committee. I have had the advantage of a trip to America and I know some of your writers. Hence I am in a position to take issue with statements about America I know to be untrue."

I recalled that sometime earlier he had disagreed publicly with an article in *Soviet Literature* which disparaged American culture.

"The critic was just mistaken, that was all," Mr. Ehrenburg said.

Was there any liability attached to the business of defending the United States against criticism in the Soviet?

He sat down again and leaned back.

"Some people say I am pro-West. But I don't especially regard myself as pro one thing or another. An issue comes up. I may have an idea or two about it; I may have some facts I think should be brought to bear on the problem. Of course, there are liabilities. No man should become a writer if he isn't prepared to be hit hard now and then.

"The writer's business is not an easy business—if the writer is any good. But please don't think that the only liabilities I encounter are at home. I am criticized abroad as well. Incidentally, even when I am praised abroad, the repercussions at home are sometimes unfavorable."

As for example?

"When I am praised for the wrong reason. Some people abroad apparently feel the only way of saying anything kind about me is to picture me as an enemy of my country.

"Incidentally, I have been disturbed for some time about the practice of some of your publishers, when issuing a book by a Soviet writer, to represent the book as something other than it is—and also the author. You will publish Forewords without the authorization of the writer—Forewords that make it appear that the writer is leading a valiant battle against his entire society.

"But this practice is not confined to the United States. Some years ago a book of mine was published in Denmark and it was falsely trumped up as an attack on the Soviet way of life. I assure you this didn't add to my popularity in my own country.

"When my book 'The Thaw' was published in London, my English publisher wired me saying he had a request from an American publisher for U.S. rights. I wrote back telling him not to give any such rights unless we had a contract protecting me against the inclusion of any Foreword or Introduction without my express consent. If my book was worth publishing, it was worth publishing for what it was. Let the readers judge it. I didn't want my books to be introduced by anyone who would attempt to give it a certain turn.

"Well, the American publisher accepted our stipulation and the contract was written. The book appeared in the United States. There was no Foreword or Introduction, in accordance with the contract. But there was an Epilogue. The Epilogue couldn't have been more offensive from my standpoint. It tried to make the book into something it was not. It was a clear violation of the intent of the contract. It had not been submitted to me. I did not even know it was going to be included.

"What is one to think about this sort of conduct? Apart from the intellectual dishonesty involved in such an approach, the incident makes one wonder whether some American publishers are more concerned about the need to appear to be anti-Communist than about their obligation to literature."

[Editor's Note: The name of the American publisher of Ilya Ehrenburg's "The Thaw" is the Henry Regnery Co. of Chicago. Mr. Regnery has been notified of Mr. Ehrenburg's statement in advance of publication and has been informed that the pages of Saturday Review *are open for reply.]*

I TOLD Mr. Ehrenburg that there were very few American writers and publishers who would not condemn such practices, as he had described them. I asked him, however, whether there wasn't some possibility of a misunderstanding, for the charge he raised was serious.

"I am not making charges," he said in a friendly tone. "I am trying to state what happened and to indicate what some of the problems are in improving the cultural relations between our two countries. But I am not embittered. As I said a moment ago, no one should become a writer if he is not able to sustain disappointments and even personal hurts."

On the broad question of American-Soviet cultural relations, I said I was certain Mr. Ehrenburg was aware of the dissatisfaction of American authors because of the fact that very often their books were published in the Soviet Union without authorization. I emphasized that I was not raising this issue in any attempt to counter-balance what he had just related about his own experience in dealing with an American publisher. More than a year ago, I said, Governor Adlai Stevenson had brought up the question of authorization and royalties on behalf of the American Authors' League, while he was in Moscow. On my own trip, I had discussed the matter with the Executive Committee of the Soviet Union of Writers, at Governor Stevenson's request. I was afraid that the meeting had not produced any discernible gain for the points I had attempted to advance.

"It's a complicated problem, as you know," he said, "but I think that at some time it may be possible to come to a better understanding. I don't want to get into the middle of the controversy. But again I say that the relations between the writers of both countries are tied to the larger question of the relations between the governments. The tensions and antagonisms of the Cold War are bound to condition the dealings that representatives of our cultures have with one another. I am trying to do what I can in that direction. Some people may call me pro-American or pro-French or what-not for so doing, but no matter. The big need is to find a way to peace. If we can reduce our prejudices, if we can deal with facts as they are, if we can develop some mutual respect — well, maybe we will have a reasonably good chance of finding peace. If we don't, then everything —*vraiment*—everything else is a waste of time."

What he had just said about peace found a strong echo in my own thinking and I told him so. But the basic question that kept hammering at me, I said, had to do with the specific measures that had to be taken if peace was to be achieved. Mutual good will and respect were important, certainly; but didn't real peace depend on specific changes in policy and program? Didn't it depend on the working machinery through which peace had to function—and not just on the atmosphere of peace?

"But at least we agree that a proper atmosphere is a proper starting place," he replied.

No argument.

LITERARY I.Q. ANSWERS

1. "Flight," by John Steinbeck. 2. "Rain," by Somerset Maugham. 3. "Powerhouse," by Eudora Welty. 4. "Tobermory," by Saki (H. H. Monro). 5. "Crainquebille," by Anatole France. 6. "Wash," by William Faulkner. 7. "Bliss," by Katherine Mansfield. 8. "Harmony," by Ring Lardner. 9. "Carmen," by Prosper Mérimée. 10. "Seeds," by Sherwood Anderson. 11. "Youth," by Joseph Conrad. 12. "Land," by Sinclair Lewis. 13. "Herodius," by Gustave Flaubert. 14. "Araby," by James Joyce. 15. "Uprooted," by Ruth Suckow. 16. "Quality," by John Galsworthy. 17. "Footfalls," by Wilbur Daniel Steele. 18. "Markheim," by Robert Louis Stevenson. 19. "Basquerie," by Eleanor M. Kelly. 20. "Judith," by A. E. Coppard. 21. "Kerfol," by Edith Wharton.

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—G. Rodney Crowther, III.

SR/Research

SCIENCE & HUMANITY

DEPARTMENTS: Research in America • Letters to the Science Editor • Personality Portrait—XLIII • Science in Books • The Research Frontier

ARTICLES: The Unimaginary Equator

RESEARCH IN AMERICA

NO TOLL ROUTES TO THE STARS!

IF YOU have an ordinary pair of eyes, you will need to peer closely at the masthead photograph above before you are able to see the stars of the Big Dipper and the very fine line of light that marks the passage through the Dipper of man's first home-made Moon: the Soviet Sputnik of 1957. But if you look hard enough you will be able to see the stars and Sputnik's route—because a meticulous and patient photographer made the event a matter of record.

No people can decide a great public issue unless the facts about the issue are set plainly before them. The report that follows is an attempt to gather into the open literature all the available information on what up to now has been a secret struggle by astronomers to prevent communications routes through the heavens from being sold to the highest bidder like privately owned real estate.

At stake is nothing less than the people's right of free access to present and future knowledge of the universe.

What the astronomers are trying to protect is man's oldest and most precious dream: that he may someday somehow at last understand what he is and whence he came.

The answer is hidden somewhere between us and the farthest stars, and no one now knows how far man will have to travel to hear the ultimate message or how much farther than that the news will have to come to reach him or what strange, yet unimagined hearing aids must be fitted to his ears to make whatever the word is intelligible.

All that the finest mind can tell us today is that we must listen intently and constantly, with no irrevocably fixed notion of what we are listening for, and above all to keep the channels open not only for ourselves and for our contemporaries but for future men who may possess keener perceptions.

As long as man simply looked at the sky, there was no real problem of an obstructed view. A handful of people who were curious enough to want to explore the mysteries overhead by distant observation, inference, and deduction, merely climbed to the mountaintops and gazed through progressively stronger magnifying glasses. But after young Karl Jansky, of Bell Laboratories, discovered in 1931 that it was possible to hear as well as to see the happenings of heaven, the situation changed rapidly and drastically. It was a revolutionary explosion in the realm of human perception. In common with most revolutions, it is not easy to explain.

It begins with electromagnetism. Electromagnetic waves are created when atoms give off energy through the electrons in their shells. Some of these waves can be seen as light. Others can be felt as heat. Still others can be discerned as sound. That part of the electromagnetic spectrum which is susceptible to detection by radio receivers attached to man's ears is 100 times as broad as the spectrum that informs man's eyes even when their vision is sharpened by the most powerful auxiliary lenses. The window through which the universe can be surveyed has been expanded enormously, and radio-telescopes that now point through that aperture from a dozen lands around the globe have already sketched in many details of cosmic environment to which we have heretofore been oblivious.

The image of the Sun, for instance, has been altered from a blazing round ball to a shape more akin to that of a nicely poached egg. Jupiter, the giant planet of the solar family, gives evidence of being surrounded by magnetically trapped belts of radiation patterned on a grand scale after the newly discovered Van Allen radiation belts girdling Earth. And just as these enlarged models of our own space travel barriers afford us an opportunity to learn by comparison, so far-off galaxies of spiraling stars provide us a mirror in which to study the spiral design that the radio-telescopes have found in the Milky Way. All this is only preliminary to the truly spectacular promise of the radio-astronomers: a decision on the age-old question of whether creation began at a fixed point of time or is a timeless process that has always been going on.

It may be too much to say that if the science of radio-astronomy had not been born when it was, the Russian rocket that reached the Moon last month would not have got there. But it is certainly true that radio-astronomers were first to listen for very faint signals from the sky and to use those signals as guides in following the paths of heavenly objects invisible to the eye. And it is also true that without tracking facilities the launching of any Earth satellite would have been impractical. Finally, experience with satellites had to precede attempts to reach the Moon or the neighbor planets of Earth.

As often happens in science (and elsewhere), the satellites and the Moon rockets turned on the very men who pioneered their creation. The only legitimate purpose of these space vehicles at the present primitive stage of extra-atmospheric exploration is to substitute for man's senses and report back what they experience. The reporting must be done over various wave-lengths of the same electromagnetic spectrum that man uses to see and hear the sights and sounds normal to his daily life, including the TV pictures and radio broadcasts recent years have added to his entertainment fare.

Events followed each other so swiftly after the 1957 Russian jump into space

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...NEWS IS HAPPENING AT NORTHROP

Norman V. Petersen
Chief of the Astro Systems and Research Group, Norair Division of Northrop Corporation

How the Outer Edge of the Earth's Atmosphere Can Be the Training Ground for Man's First Landing on the Moon

by Norman V. Petersen

One of our current studies at Norair shows that a manned capsule can be rocket-launched from the earth in a ballistic trajectory approximating an approach to the moon. A braking rocket blast fired from the capsule would push the vehicle into an earthward turn and place it in landing position – the same way a space ship would maneuver for a moon landing. Such a maneuver would be made above the earth's atmosphere in order to approximate the moon's lack of atmosphere and its low gravity.

We base these particular studies on the use of conventional manned satellite capsules modified by the addition of a braking rocket as the lunar landing trainer and a ballistic rocket booster as the launching vehicle.

The capsule would be ejected at 50 miles altitude after traveling 100 miles from the launch site. Trajectory prior to ejection could be made to simulate either a close orbit approach to the moon, an intersecting elliptic trajectory approach or a vertical approach from a direct earth-moon trajectory. The guidance system would perform automatically during the initial approach, but would be fitted with an "override" feature allowing the pilot to take over the controls during the braking maneuver.

This simulated moon landing study is only one of our many current missile and space projects at Norair. Our range of activity allows the scientist and the engineer to work in research, design *and* development. He is active in the fields of close orbit, lunar and interplanetary flight regimes as well as research in many fields of space technology. Encouraged by the outstanding facilities of the entire Northrop Corporation, the Norair scientist and the engineer has a continuing chance to broaden his activities in space age developments. He is one of those important men who are *making* the news happen at Northrop.

Current papers by Northrop scientists and engineers include: A Simulator for Lunar Landings, Norman V. Petersen; The Influence of Launch Conditions on the Friendly Rendezvous of Astrovehicles, Robert S. Swanson, Norman V. Petersen.

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that the radio-astronomers were caught off balance. When their science was young, and almost every scrap of noise their instruments picked up held some sort of excitement, these men had been content to audit the sky on any quiet, narrow lane they came across. Radio-telescopes then were too few and far between, and the sky was too vast, to permit apprehension that anyone might be crowded out. And it is probably fair to say that even now, with perhaps ten radio-astronomical observatories dotting the breadth of the United States, there is plenty of room for easy, dependable flow of information.

The struggle the astronomers are engaged in today is the sort of struggle that should always occupy science. It is not a rearguard action to save the flank of yesterday but a preliminary skirmish to make tomorrow worth living in.

There has been in session at Geneva in Switzerland since August 15 the 1959 Radio Conference of the International Telecommunications Union. The ITU was formed in 1912. Upon organization of the United Nations in 1945, the ITU became associated with it as a specialized agency. Operating thus by world agreement, the ITU has the responsibility of allocating wave-lengths of the electromagnetic spectrum for broadcasting purposes. Its regulations amount to treaties, which usually are in force for the ten year periods between meetings of the ITU administrative assembly.

THE decade now beginning—the ten years that this session of the ITU will legislate for—almost certainly will encompass an explosive multiplication of communications channels for telemetering (space telegraphing) purposes. The military services will be receiving information from more and more rockets and space probes, and the commercial telegraph and radio companies will be bouncing trans-atlantic messages off the Moon and whatever other dependable vehicles rise. Unless science, as an advance agent of the public welfare, can protect itself, radio-astronomy is in real danger of extinction.

The radio waves that come in from outer space are extraordinarily weak. They possess only about one 10,000th of the strength of the messages received by radar sets. Because of their delicacy, the star-waves are exceedingly vulnerable to man-made interference of all kinds—surface radio and TV, long distance radar, plane and missile communications, even reflections from the Moon and the planets.

It has been demonstrated mathematically that if the space-telegrapher's dream—a satellite hanging 22,000 miles above the Earth and operating as a radio post office—comes true and is assigned to any wavelength now used by radio-astronomers, it will effectively cut off radio-astronomical observations on that wavelength from all points in the hemisphere above which the satellite orbits.

THE boom in activity beyond Earth's atmosphere was not foreseeable five years ago. So when the State Department (as the American voice on ITU's International Frequency Board) began to prepare papers outlining this country's position on problems likely to come before the 1959 ITU meeting, the astronomers felt no sense of need for a united front. At the request of the Federal Trade Commission, the Naval Research Laboratory's Dr. John Hagen polled the star-watchers on the wavelengths they would want. Each responder to the poll said he'd like to stay on the wavelength he was using at that time. The FCC could not reasonably support such a disparity of petitions, and the State Department was annoyed by the scientists' lack of appreciation of the practical side of negotiation.

Result: The official United States recommendation to the ITU at Geneva offered only one world-wide listening path to the radio-astronomers. This covered that slice of the spectrum from 1400 to 1427 megacycles, and included "the hydrogen line" of 1420 megacycles on which the presence of the element hydrogen is detected. Space on both sides of the line is desirable in order to detect Doppler shifts, a phenomenon similar to the rise and fall of a train whistle when the train approaches and then recedes from an observer.

"The hydrogen line" is important to all studies of the universe because, in contrast to its scarcity on Earth, hydrogen accounts for more than three-fourths of the makeup of the stars. But there are many objects in the heavens that radiate on a number of wavelengths across the electromagnetic spectrum, and a detailed picture of these objects is impossible without matching up all the varying impressions.

The necessity of protecting much more than "the hydrogen line" for radio-astronomical observation became apparent to the scientists with the appearance of the first Sputnik in the autumn of 1957. At the general assembly of the International Scientific Radio Union in Boulder, Colo., that year, recommendations were drawn up for presentation to the International Radio Consultative Commission, the technical advisory body of ITU. Delegates from Great Britain, Holland, France, Belgium, Australia, Finland, India, Sweden and the United States took the proposals to their respective governments to line up support. All succeeded ex-

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cept the Americans. By April of 1959 the international nature of the backing for the proposals was established and CCIR okayed their transmission as "scientific advice" to the ITU assembly.

The CCIR resolution conveying this endorsement guaranteed that the proposals would be introduced at Geneva and made it appropriate for American radio-astronomers to approach the State Department again and ask for a broader American position in defense of radio-astronomy. This petition traveled through Dr. Detlev Bronk, president of the National Academy of Sciences, to Dr. James R. Killian, Jr., who then was Special Assistant to President Eisenhower for Science and Technology. Dr. Killian passed on to the Science Advisor to the State Department, Dr. Wallace Brode, what amounted to a Presidential directive. The directive did not positively support the position of the radio-astronomers but it did instruct the American delegation to ITU not to oppose protection of broadcast wavelengths for astronomical use.

THE ITU meeting will last until December 17. Discussions preliminary to the fixing of an agenda for action still have a month or so to go. After that the roads to distant knowledge will be allocated for ten years.

The United States delegation is, by its negative instruction from the White House, in the position of seeming to drag its feet on a proposal which practically every other country, including Russia, favors.

The Russian delegates at Geneva have, in fact, formally advanced the argument that radio-astronomy must have exclusive right, everywhere in the world, to the use of the following wavelengths: 322-329 megacycles (the so-called "deuterium line" where the Russians claim to have seen heavy hydrogen); 1400-1427 megacycles ("the hydrogen line"); 1645-1675 megacycles ("the OH line" on which molecular fragments of oxygen and hydrogen are thought to be detectable); 3165-3195 megacycles; 4800-4810 megacycles; 5800-5815 megacycles; 8680-9700 megacycles.

If American astronomers could hold open all those lanes across the universe, they would be overjoyed. They would be happy with the somewhat less generous Dutch proposal to set aside 39-40.5 megacycles, 80-82.5 megacycles, 152-156 megacycles, 328.6-335.4 megacycles, 610-615 megacycles and 1400-1427 megacycles for astronomy's exclusive use, with some sort of sharing arrangement on 2555-2565 megacycles, 5110-5130 megacycles, and 10230-10250 megacycles. But they would be happiest of all if the ITU representatives of their own country would come forward with a positive expression of interest in the future of knowledge for the sake of knowing.

Isn't a window overlooking the universe worth $100,000,000 to the people? (That's what the requested radio-astronomy channels might be worth in a TV auction.) Shouldn't the advancement of science merit one-tenth of the attention gladly given to radio "hams"? (That's the relative extent of the radio-astronomers' requests when compared to the spectrum now set aside to maintain amateur radio operators in their hobby.)

One thing is certain. If science doesn't get the right to use these radio channels for the future benefit of all the people, the channels will be grabbed up in time if not immediately by the military and by whichever of the fiercely competing commercial interest prove able to pay the highest price.

• • •

AS this issue of SR/Research was put on press, a letter came from Dr. Austin Smith of the Pharmaceutical Manufacturers Association. The letter contained the following paragraph:

"You may be interested in knowing that in pursuance of paragraph 7 of our Statement of Principles of Ethical Drug Promotion, which provides as follows: 'Any violation of these principles brought to the attention of the President of the Pharmaceutical Manufacturers Association shall be referred by him to the Board of Directors.' I am referring your letter and your *Saturday Review* article entitled 'The Case of the Substituted Drug' [SR/Research, Sept. 5] to the Board of Directors at their next meeting."

Among the letters to the Science Editor this month (see page 51) is one expressing regret that SR's study of drug marketing has not revealed the awkward position of the druggist who must stock new drugs ad infinitum in order to remain in business. This point was touched on, but perhaps not sufficiently, and it may later be appropriate to present the full picture from the druggist's point of view.

This same letter labors Madison Avenue in defense of Main Street. It may be comforting to believe that Madison Avenue alone is responsible for present circumstances of the drug market. But such a belief is a delusion. Main Street is at fault, too, and, in the Science Editor's opinion, perhaps more gravely at fault because a man in a small town is intimately known to his fellow townsmen and must be on constant guard of his good name. In the city, anonymity is easier.

The physician on Main Street has an influence far out of proportion to his

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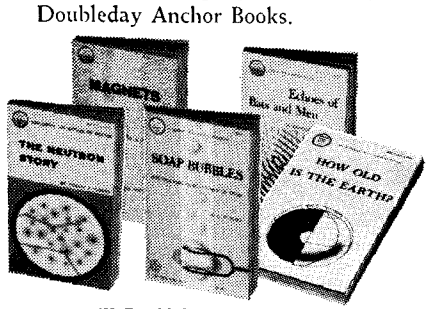

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medical practice—if he chooses to exert it. Unfortunately, the Main Street doctor is so busy taking care of larger numbers of patients than ever before crowded his waiting room that he hasn't even time to read his professional journals carefully and thus must rely more and more on the advice of the "detail men" sent to him by the drug houses.

JUST as patients have to trust the doctor, so the doctor has to trust someone to tell him about research he can't do himself. The drug manufacturers are aware of his dilemma, and have increased the number of confidantes ready to fill his ears. A recent study has shown that there is now one "detail man" from the drug sellers for every ten physicians in this country. The drug houses are currently spending $1,400 a year on "free" advice to each member of the medical profession. They are even beginning to make up digest magazines for him—drugmakers' selections of what his patients are reading in lay publications. Why? So the doctor may give his patients the answers the drug houses want him to give in answer to questions about drugs.

The total effect of the process just described has been gradual substitution of the drug house for the medical school in the postgraduate education of physicians. Fortunately, the deeper implications of this for society have been discerned by professors of medicine. The California Medical Association Postgraduate Activities Committee, for instance, is concerning itself with postgraduate courses being sponsored by drug houses without the cooperation of the medical schools.

Doctors themselves are wakening to the dangers of high pressure drug salesmanship and are subscribing by scores to the independently edited *Medical Letter* mentioned earlier in these columns; since SR's first drug report was published, the *Letter* has pushed its list of subscribers to 10,000.

THE spreading practice of using trade names of drugs in professional journal reports will come under fire at this month's meeting of the advisory board of the Federation of American Societies for Experimental Biology.

There is rising pressure in Congress for a sweeping inquiry into drug prices.

And Arthur Flemming, Secretary of the U.S. Department of Health, Education and Welfare, has advised federal legislators that new departmental regulations are being written to govern conflicts of interest like the one SR reported in the case of Dr. Henry Welch, director of the antibiotics division of the U.S. Food and Drug Administration.

—JOHN LEAR,
Science Editor

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LETTERS TO THE SCIENCE EDITOR

HYPO

See your 9/5/59 issue, page 53, column 2, line 14, word 1:
"Hypothecated"!!!

J. T. Mcnaughton.
Professor of Law
Harvard Law School
Cambridge, Mass.

Editor's note: *Fowler's* English Usage *would not sanction the substitution of hypothecated for hypothesized. As an exercise in language, however, it would be interesting to explore the extent to which a scientific theory is a pledge of future performance. Many scientists have mortgaged their careers in such fashion.*

USE OF AN ART

Cheers for John Lear's research into medications . . . this is the finest use of the journalistic art. The hard work and regard for accurate reporting these articles reflect is appreciated by your readers.

George E. Temp.
Spring Valley, Calif.

A DOCTOR'S THANKS

You are to be commended for the accuracy and forthright exhibition of facts—many of which are unknown even to most doctors.

C. W. Erickson, M.D.
South Bend, Ind.

THANKS AGAIN

May I commend you again upon your astute observation and penetrating analysis, this time in connection with the Roerig Enarax advertising?

A. Benedict Schneider, M.D.
Cleveland, Ohio

MOUNTAINS OF SKEPTICISM

I wish to congratulate you on your work and article on Enarax in the Sept. 5 issue of *SR*.
I hope enough publicity will be given to it so that the greatest number of physicians may be reminded once more of the necessity of maintaining strong skepticism about the mountains of drug advertisements that clutter our mailboxes.

Jean Feys, M.D.
Washington, D. C.

DETAIL MAN

I must say that I have enjoyed the articles by John Lear on the sharp practices of the drug-manufacturing industry. But I am still unable to see the point. What is Mr. Lear driving at? That business has its unethical practices; we all know that. That the prevalent motto in many cases is that the public be damned; but we all know that. What Mr. Lear has done, and well, is to fill in the details of what we all already know in general.

Philip Siekevitz.
Astoria, N. Y.

SPASM, ULCERS AND CANCER

It is all very well for you to rise as a champion of scientific integrity in drug advertising ("The Case of the Substituted Drug"), but you must avoid such pit-falls yourself. The statement on page 45, "Intestinal spasm can lead to ulcers and cancer." is, to my knowledge, unsupported by any evidence whatsoever. If there is any, I would be glad to hear of it. As far as I am concerned, the edge is taken off your article by this unfounded and irresponsible statement.

J. Eric Holmes, M.D.
Los Angeles, Calif.

Editor's Note: *Qualified authorities in the American Cancer Society assure the Science Editor that about 18 per cent of all cases of ulcerative colitis terminate in cancer and that appearance of the ulcerous condition in such cases is usually preceded by intestinal spasm. SR's reports did not pretend to resolve the puzzle of* causation.

MADISON AND MAIN

Of vital importance in the treatment of mental and physical diseases is a strong chain-like bond of understanding trust between physician and patient. I wonder how many such chains have been snapped by Science Editor John Lear's recent Research in America article?

Many of us have always detested the "blitz" campaigns of the Chas. Pfizer Co. But we can now also detest *The Saturday Review's* flying bannered "Case of the Substituted Drug" cover as a good way to sell a magazine to a pill conscious nation.

Mr. Lear's article was excellent and it is correct on most all points save one. It should not have been presented so one-sidedly to the layman. There are thousands of men and women doing courageous and worthy work in pharmaceuticals. How about them? Your article should have been entitled "Madison Avenue Ad Man versus Main Street U.S.A. Medicine" or something more appropriate. Also Mr. Lear's article forgets to mention the "dupe" for the whole mess, the pharmacist at the corner drugstore who must stock twenty-five trade names of the same drug in order to be able to fill his prescriptions which by law, by business, and by God cannot be substituted for in the pharmacy.

John D. Boland.
Registered Pharmacist
Alton, Illinois

POUNDING IT IN

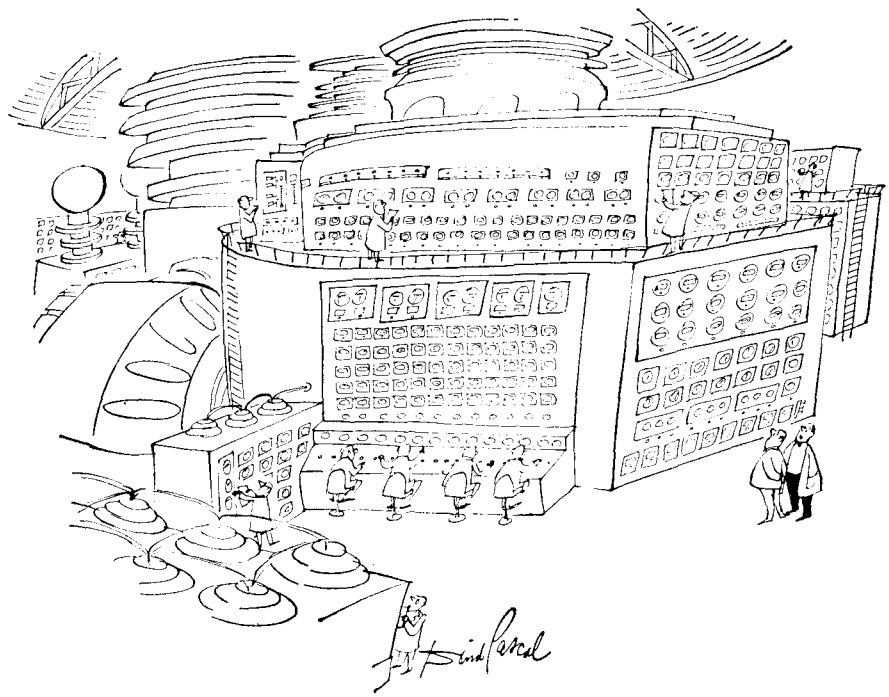
Is John Lear so insecure that he had to pound your faithful readers with the fact that he was *The* Science Editor? I'm not not sure but I think he more or less proved a case of bad advertising practices in his yarn about the substituted drug (SR/Research, Sept. 5, 1959). However, after being told *16 times* that he was *The* Science Editor, methinks he protests too much and I wonder—is he?

Martin Allyn.
Washington, D.C.

FIRST TIME

For the first time in my medical career I was conned [*SR/Research*, Sept. 5] into looking at a drug ad. It is paradoxical that medical journals are largely financed by drug ads which are systematically ignored by the medical profession. Certainly none of us would put an ounce of credence in the statistics used or claims made. Your Science Editor would do better to expose quack remedies that appear in the daily newspapers for less discerning readers.

Robert D. Jackson, M.D.
Lancaster, Wis.



"We'll have to abandon it. It's been blabbing confidential data."

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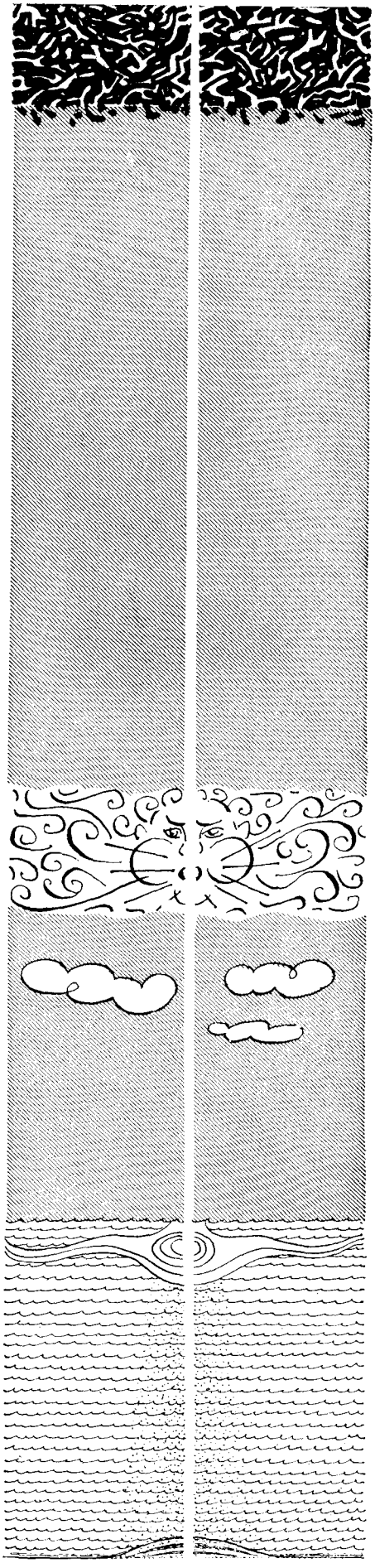

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THE UNIMAGINARY EQUATOR

As GUSTAF ARRHENIUS
JOHN KNAUSS
RUSSELL RAITT
GEORGE SHOR *described it at the International Oceanographic Congress in September*

SCHOOLBOOKS say the Equator is an imaginary line marking the greatest circumference of Earth midway between the Poles.

But the new science of oceanography has taught us that the Equator is not imaginary. It is quite real. The mark of it hangs like a hidden curtain from the topmost waves of the Pacific Ocean to the bottom of the sea, along one entire quarter of the circumference of the globe. The curtain begins where today begins—at the International Date Line—and continues unbroken to the neighborhood of the Galapagos Islands off the coast of Ecuador, a distance of approximately 5,400 nautical miles.

At the surface and in the 500 feet of water beneath it where the sunlight penetrates with enough vigor to trigger the life process of photosynthesis, the equatorial curtain is a rippling green oasis floating through blue desert-water alive with floating microscopic plants and swimming organisms feeding on each other. From there downward the curtain falls in a steady rain of the remains of these living things. And on the ocean bottom the curtain drops into a graveyard bearing millions of billions of tiny skeletons and fossils.

We have been digging in this graveyard for a little over a decade, not unlike archeologists who work to uncover the ruins of old and forgotten towns buried below the surface of the land. The first traces of these underwater tombs were found by one of us (Arrhenius) during the Swedish Deep Sea Expedition of 1947-1948, and investigation of their extent has continued ever since. Spades, hammers, and chisels are useless in such an environment; our excavations must be done with a coring device, a drill pipe suspended by a long cable from the decks of research vessels. The cores cut out and brought up in these pipes average thirty feet in length. Analysis of their chemical composition leaves no doubt that the sea floor cemetery from which they come follows the geographical Equator.

Along this supposedly imaginary line, sound waves generated by undersea explosions reveal that fossils and marine organisms are heaped in a low, gently sloping mound. Two of us (Raitt and Shor) have explored this mound and discovered a consistency of pattern within the limits of irregularities customary to the sea floor. The mound spreads across about three degrees of latitude to the north and three degrees to the south of the Equator. Since one degree of latitude covers sixty nautical miles, the graveyard we are discussing here is about 360 miles wide. The mount's topmost point is perhaps 900 feet high and that point coincides with the Equator.

The reason for the existence of these catacombs of the sea is the Coriolis Force, a geophysical phenomenon first fitted into the laws of motion by a French engineer and mathematician, Gaspard Gustave de Coriolis (1792-1843). Just as the Equator is spoken of as an imaginary line, the Coriolis Force is most often referred to as not a true force at all but only an effect of the rotation of the Earth.

Through the steadily eastward spinning of the globe, air moving toward the Equator is turned sidewise (to the right of the direction of motion in the Northern Hemisphere, to the left in the Southern) to generate the Trade Winds above and below the Equator.

Exactly on the Equator, the Coriolis Force falls to zero and ceases to operate. Immediately to the north and im-

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mediately to the south, however, it does operate, pulling away from the equatorial line in opposite directions.

As the southeast Trade Wind crosses the Equator, it exerts a drag on the surface water. This drag combines with the Coriolis Force to pull the water on the southern side of the Equator southwesterly and to pull the water on the northern side of the Equator northwesterly. The surface of the sea is thus peeled apart.

To fill the resulting "crack," cold water rises, bringing up rich nutrients into the sunbaked desert-water of the tropical sea. About 150 feet beneath the surface, a giant river emerges in some yet mysterious association with the Coriolis Force and flows swiftly to the east. We have called this river the Cromwell Current.

One hundred and eighty miles wide and 900 feet deep, the Cromwell Current carries between 1,000 to 1,500 times as much water as the Mississippi River. It comes out of nowhere, disappears into nowhere. No trace of it can be found east of the Galapagos Islands. Fifteen miles west of those same islands, the water on the Equator is traveling as fast as it is on the Equator at 160 degrees longitude. On that meridian, we have used instruments of various kinds to draw a profile of the racing stream.

We know of nothing in the oceans with such incredible symmetry. The Cromwell Current is centered on the Equator as exactly as though it were anchored there, no matter whether we measure the centermost core (moving at 3 miles per hour), or the layer of water next to the center (2.5 miles per hour), or the succeeding layer (1.5 miles per hour), or the outermost edge of the stream (.75 miles per hour). We have not actually clocked the speed of the river as far west as the International Date Line, but temperature and salt content readings of the sea persuade us that the river begins around the Date Line just as suddenly and as swiftly as it ends at the Galapagos Islands.

Its unusual nature might have been supposed to have betrayed the existence of the Cromwell Current a long time ago. Actually, discovery of the undersea river is quite recent. It came about by accident. Fishermen doing exploratory work for the U.S. Fish and Wild Life Service cast their lines along the Equator. Instead of being carried to the west, as happened at the surface, the fishermen were surprised to see the longer lines that extended deeper into the water being carried to the east. Their report of this apparent contradiction aroused the curiosity of Townsend Cromwell, a graduate of the Scripps Institution of Oceanography who was then working for the Fish and Wild Life Service in Hawaii, to study the phenomenon scientifically. He found the river that is named for him. Later, as part of the researches of the International Geophysical Year, one of us (Knauss) extended the analysis cut short by Cromwell's tragic death in an air accident in 1948. The total picture we now have is that of a swiftly-flowing river of cold water traveling east while completely encapsulated by warm water flowing west.

A REVERENCE for life in even its most primitive aspects probably is a necessary preliminary to acceptance of the sea bottom catacombs as relics of our own long-forgotten ancestors. But the story the equatorial mound of sediments tells has meaning even for those with other points of view. The story of man's wanderings about the Earth might be reconstructed under the waters with grander sweep than will ever be possible from the reminders man has left on land.

What great migrations occurred, whence and whither, because of the implacable advance of glaciers during the Ice Ages? There are clues, if not answers, in the record of climatic change that can be read in the cores.

As the ice sheets spread out from the Poles, the air above them grew colder, the rush of the winds under equatorial heating was speeded, the overturning of the waters below accelerated, and the fall of skeletons and fossils of sea organisms intensified. Thus the geological age immediately preceding our own era—the age coinciding in time with the last period of expanding glaciation—is identifiable in one of the cores rich in skeletal elements like silica, phosphate, and carbonate. By contrast, the age in which we now live has deposited a relatively low amount of these biological residues during an equal period of time.

There are four or five major and a number of minor life-rich layers of sediment underlying the most recent Ice Age. These can be assumed to be related to earlier growth and shrinkage of the Polar ice caps that marked the history of mankind.

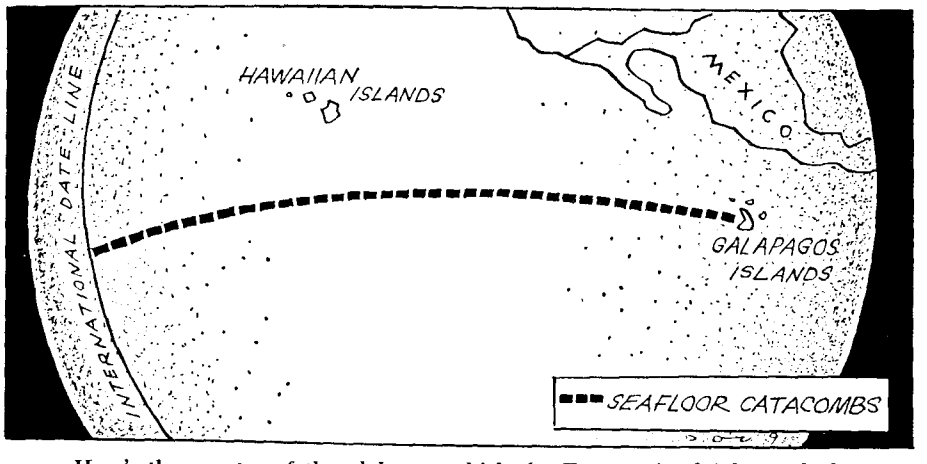
The record we have dug from the sea bottom under the Equator up to this time goes back only about half a million years. Throughout that period we can see, from the position of the thickest part of the burial mound, that the Equator has remained where it is today. This means that the Poles, too, have stayed in the same place.

In the course of preliminary drilling for the big punch scientists now are talking of making through the outer crust of the Earth into Earth's mantle, it may be that cores will be obtained of sufficient length to carry examination of the equatorial sediments backward into Cretaceous times (a hundred million years ago) when, some geophysicists think, the North Pole was in the Northern Pacific Ocean instead of in the Arctic. Should it be shown that the Equator in that distant past was where the Equator is now, the North Pole would be fixed in the Arctic.

From such evidence we can begin truly long-range studies of evolution, of early man's adaptation to his changing environment, and of the slow development of symbiotic organisms that keep man alive while themselves living on his bounty.

One of the puzzles of the burial ground on the equatorial sea bottom is the unexpected shallowness of the mound of skeletons, shells, and other debris of marine life. Considering that the forbears of all living things are assumed to have originated in or on the margins of the sea, we looked for sediments five to six times as thick as the layers we found. According to the long calendar of time, it would have seemed reasonable for the catacombs to be as much as half a mile deep and of such weight as to have depressed the Earth's crust at the ocean bottom.

Has Earth's crust shifted in the past, as indicated by the existence of coal-



Here's the quarter of the globe on which the Equator is plainly marked.

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beds and tropical flora in the Arctic and traces of a Polar ice sheet in South Africa? Will we find earlier marine graves marking where the Equator was before? Or has the Equator always been where it is now, and were the earlier sediments covered over by lava flows from great volcanic eruptions? Answers to these questions are part of the uncoded history of life.

All the information cited above has come from that one quarter of the Equator's circumference lying between the International Date Line and the Galapagos Islands in the Pacific. This stretch of open ocean is long enough to allow full play of the geophysical forces involved. The Atlantic is too narrow to give a comparable sweep. We do not yet know enough about the Indian Ocean to tell whether the equatorial mound crosses its bottom.

As the young science of oceanography grows and thrives, and as its research methods develop in sophistication, it is quite possible that future explorers will find the Equator even less imaginary than is now apparent. We already know that the Equator is marked above the surface of the sea as well as 12,000 to 15,000 feet below it. Between 30,000 and 40,000 feet up in the sky, there is a fast-moving river of wind which blows along the equatorial line as unerringly as the Cromwell Current below it. Still further up, perhaps somewhere between fifty to 100 miles above the surface of the Earth, a jet of electricity travels along the same precise route, changing the Earth's magnetic field in the course of its passage overhead.

NO SCIENTIST with enough instruments would ever need to wonder whether he was in the neighborhood of this supposedly imaginary line we call the Equator. He couldn't possibly miss its presence.

SR's Science Editor wishes to acknowledge extraordinary help and counsel from Dr. Roger Revelle in preparation of the preceding article. As director of the Scripps Institution of Oceanography at La Jolla, Calif., Dr. Revelle administers the home research base of the four scientists whose work has been described. Dr. Revelle chaired the International Oceanographic Congress at which the reports were made. The Congress was sponsored jointly by the American Association for the Advancement of Science, the United Nations Educational, Scientific and Cultural Organization, and the Special Committee on Oceanic Research of the International Council of Scientific Unions.

PERSONALITY PORTRAIT—XLIII

HIS "DISEASE ALARM" SETS INFECTIONS ALIGHT

Because of Dr. Albert H. Coons' Research on Antibodies Guarding Our Bodies, Diagnosis Is Swifter, Surer

—BOSTON

IN A North African city, an Arab boy stumbles into a medical clinic. His skin burns with fever. His pulse races. He babbles in delirium. His lungs rattle with pneumonia. Under one arm there is a minor swelling of the lymph glands.

In a St. Louis city hospital, a housewife is wheeled onto the emergency ward. Her head throbs, she says, and she feels uncomfortably warm. The beam from the intern's flashlight hurts her eyes. And there is just the faintest stiffness when she tries to bend her neck.

In London, a surgeon turns wearily away from the operating table, finished with the delicate four-hour job of transplanting a kidney into a child whose own kidneys are too scarred by disease to maintain life.

In Tokyo, a researcher bends over a tissue culture of cancer cells which seem suddenly to be disintegrating under the onslaught of an odd virus from Egypt.

The North African may or may not have bubonic plague; no one will prove it, one way or the other, for three days, though on the speed and certainty of diagnosis depend his life—and the chances of nipping an epidemic before it begins. The housewife may have polio or a form of epidemic meningitis; it may take seven anxious days to tell for sure. The London kidney transplant probably will not "take" and function, but the reasons for the failure will be only dimly understood. The Japanese researcher will learn that his virus is a consistent victor—in the test-tube—over cancer cells, but he won't know why or how.

It would be enormously useful, in North Africa or St. Louis, to be able to make the diagnosis in a day, or even in an hour. The London surgical team might do better, next time, if it had some tool for step by step analysis of the processes that caused the transplant to fail. The Tokyo virologist needs urgently to know which cells the virus infects and where, within the cell, the virus attacks.

At the Harvard medical school is a cautious, persistent physician-researcher named Albert H. Coons. He is not an epidemiologist; he has no special interest in plague or polio; he has no direct experience with kidney transplants, and his training has little to do with cancer or with viruses. But as an immunologist, he has given to all these fields—and a dozen others—a set of new and powerful investigative tools that promise (in the opinion of appreciative scientists less cautious in comment than he) to revolutionize the timetable of diagnosis.

The new tools are specially-treated antibodies, the custom-tailored proteins poured out by chemical assembly lines somewhere in the mammalian body in response to invasion by antigens—bacteria, viruses, fungi, transplanted tissue or foreign protein of any sort. Like most biologically important molecules, antibodies are exquisitely specific; an antibody to "A" group of streptococcus germ, for example, will react with nothing in the world except a group "A" streptococcus germ. To this specificity, Dr. Coons has added visibility, by hooking specific antibodies to a fluorescent dye that glows apple-green under the ultraviolet light of a special microscope.

Suppose that a physician suspects a patient's sore throat is caused by group "A" streptococcus. Using current bacteriological methods, he can swab the patient's throat and plant the specimen on a nutrient medium to incubate. If the organisms in the specimen are alive, and if they grow properly, and if there is only moderate contamination with other bacteria, he'll have certain answer —in two or three days.

Now suppose that the physician has on hand a stock solution of fluorescent group "A" antibodies (made by injecting streptococci into rabbits, harvesting

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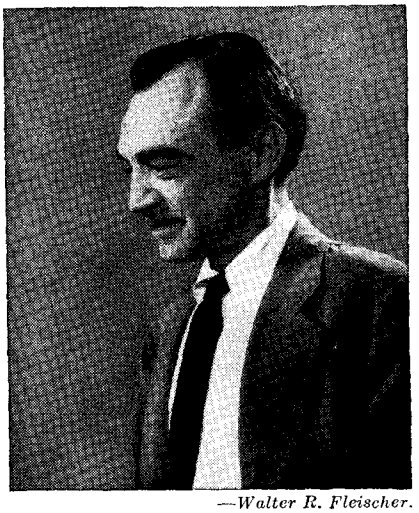

—*Walter R. Fleischer.*
Dr. Albert H. Coons

the antibodies from the rabbit's blood, and coupling them with fluorescent dye). Now he can take the throat-swab specimen, incubate it briefly, smear it on a slide, and add a drop of tagged antibody. If the dangerous organisms are present—dead or alive, pure or mixed, in small or large numbers—they and only they will react with and "fix" the antibody. After the slide is washed and placed under the ultraviolet microscope, the tell-tale glow will announce, in effect, "here they are." Total time: three hours.

Such diagnostic methods are not yet available to private physicians. It will be some years at least before the new techniques are standardized and simplified for wide use. But in the laboratories of the U. S. Public Health Service's Communicable Disease Center, more than twenty such specific tests—from anthrax to diphtheria, malaria to ringworm, syphilis to whooping cough—are now in research use. The list grows weekly.

It is possible now, CDC scientists say, to pin the diagnostic glow on plague bacilli in one or two hours instead of the conventional three days, on rabies virus in twenty-four hours instead of two weeks, on polio in two hours instead of seven days. Until now, no direct method was available for identifying a single virus-infected cell in a microscopic field. But such a cell will glow with fluorescent antibody.

All this began with an idea in Dr. Coons' head. An interest in medicine had taken him from Gloversville, N. Y., to Williams College to Harvard Medical School. A taste for research brought him, in 1940, to the famed Thorndyke laboratories maintained by Harvard and the city of Boston in the vast, crowded City Hospital. The late Dr. George Minot, a Nobel laureate and then the Thorndyke's director, supplied the first research grant of fifty dollars. Current speculation supplied the theory that rheumatic heart damage was due to some kind of an abnormal antigen-antibody reaction. Dr. Coons' idea was this: Why not make antibodies visible, and then look for them in rheumatic lesions?

A British researcher had already coupled antibodies to a colored dye. Coons repeated the work. The dye proved too faint to be useful in microscopic slices of tissue. A year later, as a research fellow at the medical school, he thought of fluorescence. The first attempts again were disappointing.

Coons dropped into the office of Louis Fieser, Harvard's distinguished organic chemist. "Fieser told me he had a couple of young fellows downstairs who were making proteins fluorescent," he recalls. "Antibodies are proteins. I ran down to look. There was a young chemist named Hugh Creech, busy coupling cancer-causing hydrocarbons to protein. Under an ultraviolet light, the compound fluoresced. In effect, the proteins were labelled. I gave Creech a batch of antibody, and it worked just as well."

Upstairs, another colleague—Dr. Alan L. Grafflin—was constructing a fluorescence microscope for kidney research. He speeded his work to meet Coons' needs while the immunologist "ran up and down the stairs all day between his lab and mine, bringing slides for another look."

In six months enough work was completed to pick the best fluorescent dye. Red and blue were colors normal tissues sometimes display. But no normal tissue specimen ever turns apple green. So Coons went to work to develop an apple-green glow.

From 1942 to 1945, he was busy elsewhere—with the U. S. Army in the South Pacific—and the work stopped.

After the war, with Dr. Melvin Kaplan and others, Coons polished and extended the new technique, which came to be hailed as "one of the major original inventions in medical science during the past twenty years." Bacteriologists, virologists, and public health specialists seized on the diagnostic applications. Dozens of visitors came for a closer look. Research fellows were trained—and left for other centers to begin new studies. The American Heart Association made Coons one of its lifetime career investigators.

Most of the diagnostic studies (the application of fluorescent "tagging" that has attracted the greatest scientific activity) have been and are still being done elsewhere. "In some diseases—for example, plague—a rapid diagnosis is of great importance," Coons conceded recently, but added wryly, "Unfortunately, the diagnosis must be thought of before it can be made." His own concern, at 47, is increasingly with what he regards as a fundamental problem: the synthesis of antibodies.

The pace in the laboratory, as a result, is accelerating, but Coons still finds time to tinker as well as to work. A colleague reports: "He's a born tinkerer. He'll wander about the lab, looking at people's research set-ups, poking here and adjusting there. I think he likes it best of all when the building's air-conditioning unit breaks down; twice this summer he's clambered up to the roof to investigate the problem himself. And he's pretty handy when the automatic elevator goes haywire."

AT HOME in nearby Brookline, things are equally active, thanks to five children (four girls and a boy) aged two to ten years. Occasionally, Coons adds to the din by playing the piano—"Vigorously," a friend notes, "but not nearly as well as he researches." Wife Phyllis is a newspaperwoman on the Boston Globe's society-section staff.

In his office, his shoulders stooped slightly as if he were still hunched over a microscope, Coons clearly perks up when conversation with a visitor turns to the basic-research implications of his work. As is often the case in science, he feels, the narrower effort to develop a technique or solve a specific disease problem is most rewarding when it throws light on fundamental puzzles.

Where in the body are antibodies made? How long do they survive? What is the mechanism of their continued manufacture? What parts of their targets, the antigens, do they hit? What is the clue to their specificity; does an invading antigen serve as a mold or template for antibody formation, as a lock might mold its key? How does the body "remember" remote infections and respond with floods of appropriate antibodies if they occur again?

To the first of these puzzles—where antibodies are made—Coons has accumulated evidence suggesting that the protective substances are formed in the plasma cell, found in specialized connective tissue, lymph glands, and occasionally the bloodstream.

What is most interesting, even startling, is the "how" of this process. For the plasma-cell antibody factories are not primed and ready to roll when infection begins. Instead, it seems, invading antigen stimulates an innocuous, quiescent precursor cell. What follows is a "biological explosion" of rapid cell growth and division, ending in the production of large numbers of mature plasma cells, all presumably making antibody against the original invader.

Coons has called this "an intricate biological dance." The metaphor is apt. The task now is to learn the molecular steps—the chemical choreography. And for stage lighting, there is always that fluorescent, apple-green glow.

—H. JACK GEIGER, M.D

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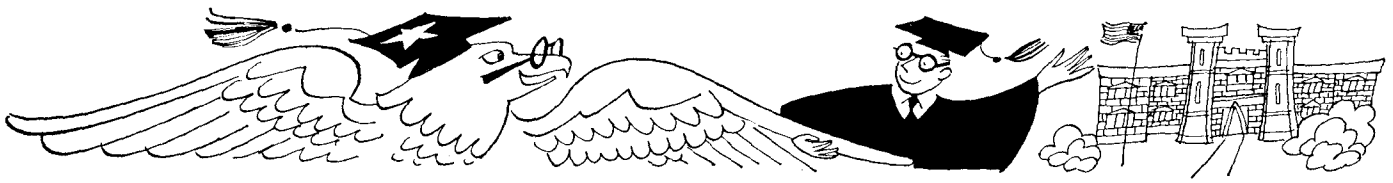
SCIENCE IN BOOKS

SOCIETY GOES TO SCIENCE SCHOOL

One of Autumn's Most Important Books Challenges Scholars and Politicians



PRESSURES from society will be exerted on science and they must be exerted without wrecking science. In this vitally important and delicate process, the importance of communications between the worlds of science and politics cannot be overstressed. If scientists and universities do not participate in shaping and directing these pressures, decisions—perhaps unwise ones—will be made for them.

Those acting in a political capacity must impress on the world of science the urgency of social problems to which research can contribute. Conversely, those functioning in a political capacity must be told when fields of study are or are not "ripe," and they must be willing to leave unripe fields fallow. Some of those functioning as scientists must be willing to accommodate to social pressures, and to assist in a realignment of scientific effort when important social goals appear attainable through science.

The problems arising in the search for a workable relation could be solved by the [government] agencies, the universities, or the National Research Council. But the machinery that actually has been invented and adapted for the task is the scientific advisory group. Made up largely of scientists from universities, the advisory group is a new means for deciding whose research will be financed in universities. Many decisions formerly made within single universities have been transferred to faculty members from many universities regrouped by discipline or by research problem. This method of arriving at decisions, which was almost a prerequisite to the successful operation of the system, has shifted important powers of decision from federal administrators and from universities. Both parties have accepted the transfer of power because both have gained much more than they lost.

Apart from the parties immediately concerned, the nation profits from this system. The advisory groups are a means of making the state responsive to the needs of science, rather than the master of science.

In turning from the past, I assume that large amounts of federal money will probably be available for research in universities for the indefinite future. Given this probability, we should not be immobilized by staring fixedly into the eye of the danger of federal control, or other dire consequences of federal support. The wiser course is to consider how the imperative demands of society can be harnessed for the good of science and society.

The removal of some existing difficulties will be made easier if both parties continue to recognize that their objectives are in part different and that the important questions will be resolved through political processes rather than through technical discussions. The important problems relate to the basic role of the federal government in science, the functions of universities, and the functions of university, industrial, and federal laboratories. Not only goals and values but a great deal of money is at stake.

Maintenance of the adaptability that has characterized government-university research relations over the past decade is of prime importance because the substance of research will shift and national needs that can be met by research will change. Over long periods of time, the relative urgency of stimulating fundamental as contrasted with basic research may change in this country as it has in others. Not only will research change, but the broader question of the role of the federal government in relation to all of the functions of universities will come to the fore. In this connection, the lack of balance between resources for teaching and for research will have to be dealt with, and the role of the federal government in redressing the balance will be a central problem over the years ahead. Since advisory groups are the major means by which the changing needs of science, of universities, and of government are kept reasonably in phase, these groups must be retained and strengthened.

The research centers that were so prominent during and after World War II should also be continued and expanded. In the interest of universities, an increasing proportion of the nation's research, including basic research, should in the future be conducted outside universities in order to sustain the freedom and flexibility of the university environment. For this reason, laboratories outside universities should not be regarded as competitors. They should be viewed as a means whereby the volume of research required in response to irresistible economic, political, and humanitarian forces can be undertaken without forcing universities to undertake inappropriate work.

The centers do absorb scientists, however. Most of these scientists come from universities, and rapid growth of centers can impair the capacity of universities to train the next generation of scientists. Therefore, the rate of growth of centers, their relations to universities, and the nature and extent of their teaching responsibilities comprise one of the most complex and significant problems facing government and universities over the years ahead.

WITHIN the federal government, the fact that there has been no point within the executive branch at which individual universities could present their total needs and resources poses a problem. More significantly, the executive branch of the federal government has not been organized in a manner to permit an effective, continuing examination of the total effects of the research activities of all federal agencies upon higher education. Most of the federal agencies which distribute funds to universities have a research and not a training mission. Even those with a training mission, such as the National Institutes of Health, the Atomic Energy Commission, and the Office of Naval Research, have no statutory authority to concern themselves with the long-run effect of federal research expenditures on higher education in this country. They may do so out of a sense of

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responsibility, within limits set by law, but the National Science Foundation is the only agency with a clear mandate.

At the top, it is important that the preservation of a strong, diversified, free system of universities be viewed as a goal as important as the attainment of the operating objectives of federal agencies. This attitude should be diffused throughout the agencies and reflected in their actions. At the same time, there must be concern for other considerations of equal importance, such as the proper division of federal research, the relations between strategic military plans and scientific effort, and science in relation to foreign policy.

By moving to the White House responsibility for those aspects of national science policy that are effectively dealt with centrally and by emphasizing the responsibilities of the National Science Foundation for the promotion of basic research and for education in the sciences (Executive Order 10,807, March 13, 1959), the President strengthened the structure for dealing with the effects of federal research on universities. The structure was further strengthened by reconstituting the President's Science Advisory Committee as a group of nongovernmental advisers reporting directly to him. The appointment of the Special Assistant to the President for Science and Technology was another important step. Finally, the problem of securing coherent policies among the agencies was attacked by the establishment of the Federal Council for Science and Technology. Significantly, an answer was not sought through recommending the establishment of a Department of Science, a proposal made periodically since 1884. Problems of policy relating to the whole executive branch can be dealt with most effectively not in departments but in the Office of the President.

I do think, however, that additional steps will eventually prove desirable. The establishment of administrative devices through executive order lacks the sanction of Congress, and those characteristics of the Executive Office of the President which are most enduring are those established by statute. The next step in the evolution of a fully adequate structure for science policy at the top of the executive branch might therefore be the establishment by statute of a science and technology office in the Executive Office of the President. This organization might well be analogous in structure and function to the Council of Economic Advisers. Such a group would have the proper status, and it would be an enduring part of the Executive Office of the President. The establishment of a Congressional Joint Committee on Science and Technology, analogous to the Joint Committee on Atomic Energy, would further strengthen the total federal structure for dealing with science.

—*Harvard.*

ASST. PRESIDENT George Kistiakowsky: **His office ought to be confirmed by statute.**

Since a statutory Council for Science and Technology would in a certain sense be a part of the executive branch of the government, the need for vigorous, independent criticism of the scientific policies of the federal government would become even more important. This role is one which might be played most effectively by the National Academy of Sciences.

The structure should be designed throughout for the effective performance of functions because the most significant unresolved problems relate to the substance of research and education rather than to the administrative forms. While basic research is now better supported than ever before, gaps exist because some important investigations are outside the area of interest of any agency except the National Science Foundation. For example, investigators of high competence in such areas as bioluminescence, archeology, meteorology, pure mathematics, linguistics, astronomy and radio astronomy, field studies in biology, and geology have received inadequate support, as has analytical engineering—the sophisticated scrutiny of available knowledge to determine what kinds of "things" can be built and what can be invented with existing knowledge.

AT THE same time, it should be borne in mind that lack of money is not now the most important barrier to the establishment of greater national strength in basic research. The more acute problems relate to the training of manpower, the effects of heavy research support upon universities as educational institutions, and the terms and conditions under which federal funds are distributed.

Funds are still dependent upon year-to-year appropriations which may fluctuate sharply. A productive next step would be to place research and development appropriations on a two-to-five-year instead of a one-year basis. Much federal money is still provided for research that sets narrow research tasks and requires specific performance from the investigators. Here, it is useful to recall that the obligation of the federal agencies is not to meet the full wishes of the universities. A degree of incompatibility between the objectives of the agencies and universities is built into the system because the agencies have functions that are not necessarily best discharged by acting in a way most congenial to universities. They may adapt their policies to the extent that maintenance of strong universities is compatible with government objectives.

The critically important problems of training enough scientists well and of using them well are far from resolved. The support of scientific training provided as a by-product of support of research has been useful, but fortuitous and not entirely satisfactory. A much wider federal scholarship and fellowship program is needed to ensure that no talent remains untrained. In addition, the status of the large group of professional nonfaculty scientists loosely attached to universities should be improved. But there appears to be no way of using this talented group more effectively until universities have enough money to hire them as faculty members.

Underlying all of the specific unresolved problems relative to government-university relations are the cultural values and pressures that have played such an important role since World War II. These will continue to exercise a dominant influence on the policies of both government and universities. Those facets of our national culture which have in the past militated against intellectual excellence as a paramount goal will probably change slowly because they are so deeply ingrained. Until learning of all kinds and exploration of the unknown in all fields are more widely respected as ends in themselves, social pressures will be exerted away from rather than toward intellectual excellence. Part of the problem is that some universities do not establish an environment where intellectual excellence is valued most highly. A university system closer to the ideal of a company of scholars engaged in creation, transmission, and preservation of knowledge would involve a change in the values, the rigor, and the intellectual discipline of many universities.

—CHARLES V. KIDD
in "American Universities and Federal Research," (Belknap Press of Harvard University Press, $6).

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THE RESEARCH FRONTIER

—Princeton University.

WHERE IS SCIENCE TAKING US? *To areas of the universe where electricity manifests itself in unfamiliar forms: for example, as plasma, the fourth state of matter, in interplanetary space and in terrestrial experiments with hydrogen power. Somewhat less esoteric but equally fascinating and more immediately practical are acrobatics being performed with nonuniform electric fields at Princeton University's Plastics Laboratory. Directed by Prof. Louis F. Rahm, this lab has pioneered since 1945 in study and teaching of the electrical, chemical and mechanical nature of plastics. The author of the exploration report below has been there since 1957 and is now in charge of research into the effects of nonuniform fields on particles of plastics. He wishes attention to be called to the considerable contributions of two graduate students, Charles Plymale and James P. Schwar, to the work here described.*

HERBERT A. POHL
(*Princeton Plastics Laboratory*)

MAN IS accustomed to use four principal forces to separate mixtures of physical substances: the mechanical force of gravity, chemical forces dependent on the action of strong acids, nuclear force as demonstrated by lead shields absorbing radiation, and magnetic force in such action as pulling iron and steel from among other materials. A fifth force—electricity—has also been available but has been little used except upon electrically charged particles, as in electrolysis or in the collection and capture of dust.

A new electrical method of unmixing mixtures of powdered substances is now ready for use. It employs the direct action of electric fields upon the inherently different electrical properties of different substances.

Electric fields act in two different ways. One way is very familiar. It is a result of the ability of electric fields to pull *charged* particles around. This effect occurs whether the electric field is uniform or nonuniform. The second effect occurs only when the electric field is nonuniform, and it acts upon *neutral, uncharged* matter. The uncharged particles respond because of a natural phenomenon that is not as widely understood as it might be.

Everything is affected by electricity to some degree. The degree of the effect on a given substance is known as the *dielectric constant* of that substance.

When we are dealing with molecules, the tiny particles of which matter is composed in its normal state, the difference between *dielectric constants* of different elements is very small. Consequently, study of the possibility of practical application of the difference was left quite uninvestigated for many years. The writer made some theoretical calculations in 1937 and discussed the results with Professor Peter Debye of Cornell University, who agreed with the conclusions reached. One factor stood out in the calculations: The effect ought to vary in direct proportion with the cube of the diameter of the particle.

Now the diameter of a molecule is indeed very small. Suppose the effect were applied to larger particles, such as grains of sand?

Tests undertaken by the writer at the United States Naval Research Laboratory during World War II showed that nonuniform electric fields could act upon suspensions of gross matter to pull out particles. Subsequent studies at the Princeton University Plastics Laboratory have led to clearer understanding of the rules governing nonuniform field effects. We have uncovered a number of rather striking actions that take place under nonuniform electric field influence.

Powders or liquids may be literally thrown about. Organic liquids can be made to jump as a spout or fountain about four to six feet into the air. Drops of liquid may be caused to hang in space, or to travel in satellite-like orbits about an electrode. Powders suspended in non-conducting liquids like benzene may be provoked to clump or precipitate onto an electrode. By stepping up the strength of the nonuniform fields, clumped powders can be released or even re-suspended in a solution. Most important of all, for the present discussion, is the direct dependence of the degree of pull by the electric field upon the *dielectric constant* of a solid substance.

A high *dielectric constant* means a strong pull, a low one means a weak pull. The *constants* vary widely, as the table below signifies:

Substance	*Dielectric Constant*
Air & other gases	Close to 1
Sand (quartz)	3.8
Diamond	5.5
Aluminum Oxide	8.5
Zircon	12.5
Water	78
Barium titanate	1740

Sharp differences in *dielectric constant* between wet and dry substances occur frequently, especially in material of interest to the pharmaceutical field. There are also interesting and useful differences among minerals.

Our mode of operation is to drop or shake our powder mixture at a constant rate onto a trough immersed in liquid. The flat bottom of the trough is inclined about thirty degrees from the horizontal and given a slight sideways tilt to encourage the powders to slide down along one edge of the trough under the influence of gravity. Properly curved electrodes, placed above and below the trough, produce the desired nonuniform electric field. The field strength is then adjusted so as to make the one powder move to the higher of the trough sides and leave the other powder falling along the lower edge of the trough. Two exit ports at the bottom of the trough carry the streams of powder away.

The apparatus in the form described above has been used successfully in reconcentrating industrial diamonds from diamond wheel cuttings of ceramic materials, removing zircon from rutile-zircon sands, pulling sodium dichromate from a mixture with titanium dioxide, separating polyvinyl chloride from rutile, recovering silicon carbide from mixtures with aluminum oxide and with silicon dioxide (quartz sand) and with calcium fluoride, and withdrawing metallic zinc or iron from mixtures with sand.

We believe the method will prove increasingly useful in mineralogical, pharmaceutical, metallurgical, and other analyses and preparations.

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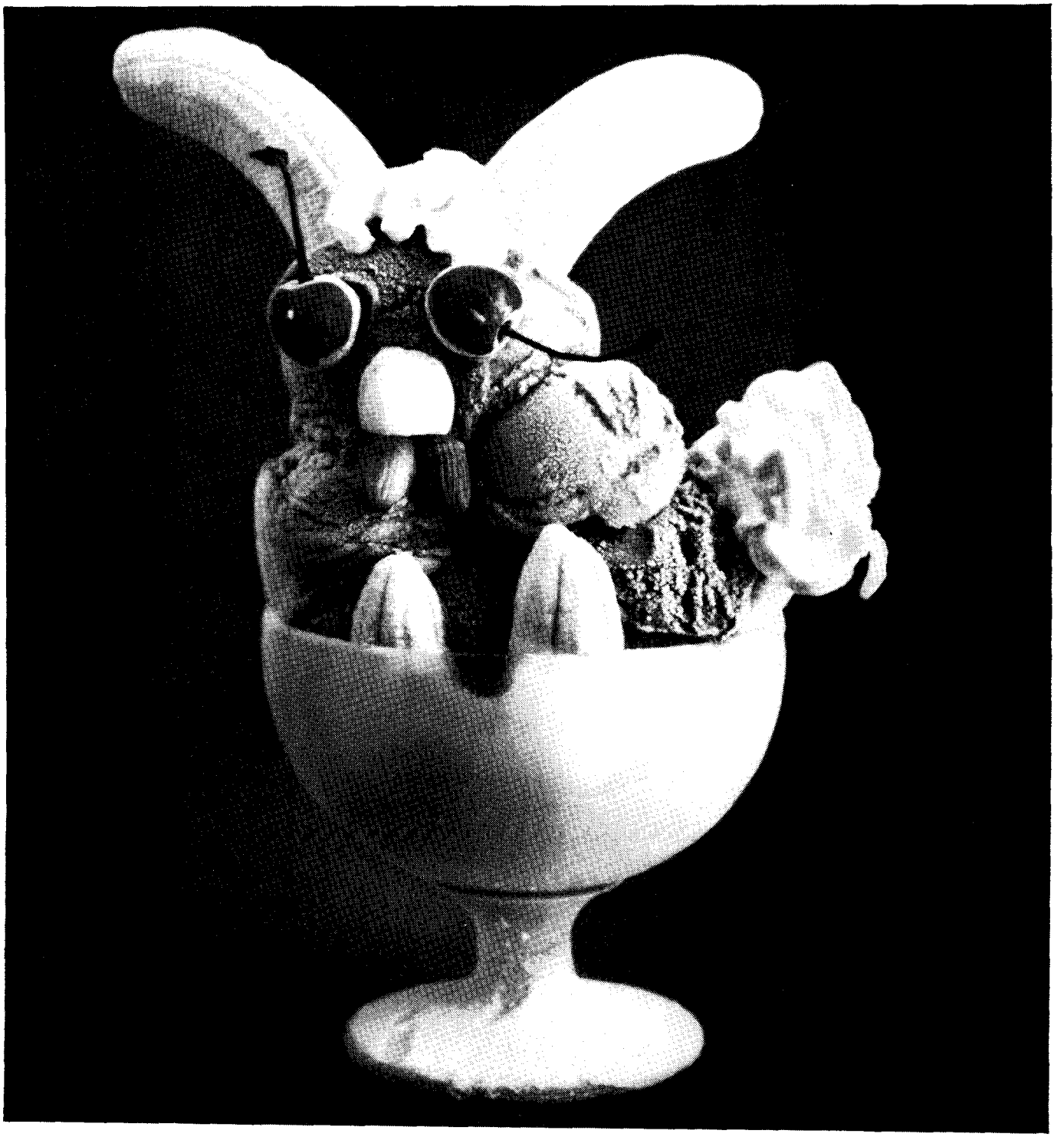

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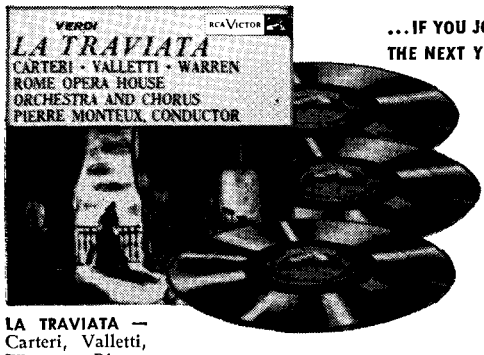

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